The Mining Inumal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2208.-Vol. XLVII.

LONDON, SATURDAY, DECEMBER 15, 1877.

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CLAUSTHAL MINING SCHOOL NOTES-No. LIV.*

BY J. CLAPK JEFFERSON, A.R.S.M., WH. SC., Certificated Mining Engineer.

(Formerly Student at the Royal Bergakademie, Clausthal). [The Author reserves the right of reproduction.]

SECTION III.

In order to keep the cutting tool in contact with the end of the bore hole the following arrangement is devised for a gradual automatic feed, or pushing forward of the cylinder. A double threader screw, with a keyway on it, extends the whole length of the machine. On the cylinder two strong lugsare cast, and between these a nut is placed, which is prevented from rotating by means of a flat side, which bears against the outside of the cylinder; through this nut and these two lugs, which are bored out to suit the screw, the long screw passes. At the back end of the machine a sleeve, with a ratchet face, is passed over the screw, and which can slide along the screw, but which cannot in consequence of the key rotate except with the screw. Fitting into the ratchet face of this sleeve is the ratchet face of a second sleeve, the arm of which is attached to one the screw, but which cannot in consequence of the key rotate except with the screw. Fitting into the ratchet face of this sleeve is the ratchet face of a second sleeve, the arm of which is attached to one of the tappets on the valve spindle, so that this second sleeve receives a reciprocating or rocking motion, its ratchet teeth in one direction slipping over the inclined portion of the ratchet teeth of the first sleeve, and in the opposite direction the vertical faces of the ratchet teeth engaging in each other causes a rotation of the first sleeve (which is fitted with a key), and consequently of the long screw, which as the nut tharough which it passes cannot rotate causes the forward motion of the cylinder. By properly adjusting the length of the arm of the sieeve, and that of the tappet, and the position of the latter, it may be so arranged that the sleeve which has the arm attached to it shall oscillate far enough for the teeth on the second sleeve to move so far back as to drop in and engage with the vertical faces of the teeth on the first sleeve only when the piston has made a complete stroke. In this manner the amount of feed can be regulated automatically to suit the varying nature of the piston has made a complete stroke. In this manner the amount of feed can be regulated automatically to suit the varying nature of the rock passed through. The sleeve, which is fitted with a keyway, is kept pressed again: the first by means of a spiral spring. The end of the long screw has a square portion filed upon it, so that a handle can be litted on and the borer withdrawn more quickly from the bore hole. This machine, with the frame as arranged for quarrying or sinking purposes, weighs about 150 lb., and with a pressure of 5 atmospheres will drill a 2½-in, hole in granite 1 ft. deep in a minute; from 6 in. to 8 in., however, may be taken as the average. The machine works at the rate of from 500 to 800 blows per minute. For drilt work the following arrangement for mounting the drill is used:—The frame of the carniage consists of two castings, connected together by means of side bars. On each side of each casting a short axle is bolted, on which the four wheels (on which the carriage runs) are fitted. One each content of the back casting a couple of standards are fitted, having a screw arrangement at the top for tightening them up against the roof. Between these standards a cogwheel is firally bolted or each on the casting, above and passing through the wheel as a bearing is a loose pin, which forms a large

tightening them up against the roof. Between these standards a cogwheel is firmly bolted or cast on the casting, above and passing through the wheel as a bearing is a loose pin, which forms a large nut at the ent. The piece forming the nut carries a small bracket, through which a small spindle passes carrying a small cog-wheel and a worm-wheel, the former gearing into the larger fixed cog-wheel and the latter into the long screwed horizontal bar. Through this nut a long horizontal bar, which is screwed for the back half of its length, passes; the front smooth end passes through a bracket, which can slide on a long curved (about the pin forming the nut) plate. To this bracket is bolted a smaller one, carrying a small endless screw, the axle of which having a square flat piece filed upon it can be rotated by the means of a handle. A large worm wheel is mounted on the long horizontal bar, and is fastened to it by a key fitted into a long groose in the horizontal bar, which allows the latter to slide through the wheel, but prevents its turning independently. On the end of the long bar a socket is cottered, and through this socket a very strong standard can slide, or be firmly fixed by means of a set of screws. This standard carries a face plate, to which a corresponding portion of the easting forming the drill frame can be bolted. By means of a serew arrangement this standard can be atrutted against the floor, roof, or sides of the level. On rotating the small endless screw above mentioned it will be evident that on unclamping the proper screws the horizontal bar and connections can be pushed forward, or rotated about the har itself or rotated about the nut on the long forming the drill frame can be to the hard of the level.

roof, or sides of the level. On rotating the small endless screw above mentioned it will be evident that on unclamping the proper screws the horizontal bar and connections can be pushed forward, or rotated about the bar itself, or rotated about the nut on the back casting forming part of the frame of the machine.

For sinking or quarrying work the frame consists of two strong side plates of cast-iron, having at their ends vertical holes for the reception of short thick pointed bars, which form the feet on which the frame rests. The bars are fixed tight by means of set screws. In the centre of each of the side plates is a bearing for a large hollow shaft, which can be turned trany desired angle, and firmly fixed by set screws; the length of the hollow shaft or the distance of the side plates apart depends on the number of drills it is intended to use at one time. On this hollow shaft, and capable of being rotated round it, is a socket, to which is attached a long shaft; this shaft has a number of rings cut upon it, so that it serves as a rack. Embracing this shaft, or bar, is a muff, having a face plate cast with it, to which a corresponding part of the casting forming the frame of the drill can be bolted. A small toothed wheel is fitted in the muff, and gears in the rings on the vertical bar. The axle of the toothed wheel can be rotated by means of a handle, and the drill can thus be raised or lowered.

Another rock drill, exhibited in the Paris Exhibition of 1867, is that of Tilger, of Mulheim, in the Ruhr district. The machine possesses the same design as that of Sach, with an automatic rotatory and forward feed motion. In the Tilger rock drill the valve cheet is placed beneath the cylinder; the compressed air enters by what is usually the exhaust port, and passes downwards into the valve, by which it is distributed alternately on one or other side of the piston. The valve and valve chest are exactly similar to those of Sach's. The cylinder is about 3 in, diameter, and the piston possesses the usual arrangeme

of Sach's. The cylinder is about 3 in diameter, and the piston possesses the usual arrangement of a thick piston rod at the front and a thinner at the back end. The thinner has a cross piece, or transverse, sitting loosely on it, through which the piston rod can slide. The ends of the traverse slide in grooves in the side bars forming the frame of the machine, as in Sach's drill. On the thinner piston rod are two swellings, which towards the end of the stroke strike against the traverse. Connected with the traverse is an arm attached to a rocking pin, to which is attached a shorter arm, which strikes alternately against a couple of nuts on the valve smiddle. strikes alternately against a couple of nuts on the valve spindle, and so towards the end of each stroke reverses the valve. On the same rocking pin are two short horizontal levers, which move two vertical rods on each side of the back end of the cylinder. One of these rods works into a ratchet wheel, which effects the rotation of piston rod and borer; the other works into a ratchet wheel attached to a pinion, which gears into a second pinion, and causes the rota tion of the nut (attached to it), which fits on to one of the screwed bars forming the frame of the machine, and thus causes the forward motion of the cylinder. The cylinder has four lugs cast upon it, through which the screwed bar and a second bar pass, the latter being connected together at the ends by means of a cross piece; a third stronger bar runs beneath the centre line of the cylinder, &c., and is acrewed at the ends into the above mentioned cross pieces. and is screwed at the ends into the above mentioned cross pieces. To this third bar a central pin is attached, by means of which the machine is mounted on the carriage (designed by Böring), as mentioned above.

tioned above.

During the driving of the Hoosac Tunnel, in Massachusets, U.S., a rock drill invented by Mr. Charles Burleigh, of Fitchburg, Massachusets, was extensively used. The following description of the machine by Herr Bergrath Lottner does not agree with the description of the Burleigh rock drill as patented in this country by Mr. Thomas Brown, C.E., of London. According to Lottner's descrip-

tion the rock drill acts on the same principle as a steam hammer, and is consequently a modification of Schwartzkopff's rock drill, which we have previously described, the piston striking upon the head of the borer like a hammer, which during every seturn stroke of the piston is gradually rotated, the machine being pushed for ward as the hole gets deeper by means of a screw worked by hand. The drill can be actuated either by steam or compressed air, and is fixed upon a tripod. Each of the legs can be lengthened or shortened by sliding one half of the leg up or down, and clamping it by means of screws, so that in this manner the drill can be placed in any position or inclination required. The drill is manufactured in five different sizes, which weigh from 170 lb. to 1100 lbs., and bore holes from \(\frac{3}{4} \) in. diameter, and from 30 in. to 7ft. deep. According to this description the advantage of the machine is said to consist in the fact that the shock of the blow is received by the borer only, and does not affect the finer mechanism of the machine, and its effect exceeds from three to four times that of hand drilling.

The Burleigh rock drill, as patented in this country, appears to be a very different machine. It consists, besides the drill, of mechanism which automatically changes the amount of feed according to the hardness of the rock to be drilled through; and in this machine the valve for admitting the steam or compressed air is moved so quickly at the end of the stroke that the blow is struck with the full pressure of the compressed air, and at the same instant the valve is reversed and the exhaust opened, so that the rebound of the drill takes place naturally, and is not hindered by the pressure of the steam in the cylinder; and, as in all the newer and better arranged rock drills, the gradual rotation of the borer and the advance of the cylinder these place during the back stroke, so that the whole force of the steam is exerted during the forward stroke through the drill to cut away the rock, a

covers the steam entrance, and acts as a valve in shutting off the compressed air, which is making its escape, and the compressed air thus caught between the piston and cylinder cover acts as a cushion by which the motion of the piston is arrested, preventing its coming into contact with the cylinder cover.

The cylinder is made in one casting with the body of the machine, which covers most of the rotating and feeding mechanism placed at the back end of the drill. This casting has two short (square in section) wings running the whole length of the casting, and which fit in corresponding grooves in a trough-shaped casting, forming the bed of the drill, which bed is provided with a "frustro" conical plate, by means of which the drill can be clamped to a face plate fitted on to a bar forming part of the support or carriage for the drill. The machine, it will be understood, can be rotated about this conical plate. The front end of the cylinder is closed by a cover, which screws into it, and which is further secured by a set screw; into this cover a long stuffing-box is screwed. The back cylinder cover consists of a long annular sleeve, having at one end a groove cut in the periphery, which fits air-tight against the cylinder, a pair of set screws passing through the cylinder fit in this groove, so as to allow of the sleeve being rotated about its axis, but preventing all endwise movement. On the front end of the sleeve is screwed a ring, the outside diameter of which corresponds exactly to the diameter of the cylinder, and fits air-tight; this ring has a groove in it like the back end of the annular sleeve. Within this ring is a ring packing, which is kept somewhat tightly pressed against the piston rod by means of metallic rings fitting in two grooves turned in the piston. Each of these grooves is in communication, the one with one side and the other with the other side of the piston by means of a malh holes drilled in the piston. The borer is bolted firmly to the front end of the piston rod.

The piston rod, and

the friction of the ratchet wheel in turning is much less than that of the piston rod and piston.

Besides the inclined slotway there is a straight slotway in the back portion of the piston rod, in which a key fixed to the before mentioned friction ring (next behind the ratchet wheel) fits and slides. This ring serves as a break on the piston, to prevent its turning back during the forward stroke from the position given it by the feather and spiral slotway. This friction ring, then, serves as a medium to make the friction on the piston during the forward stroke greater than the friction on the ratchet wheel, so that it is the latter, and not the former, which rotates during the forward stroke. On the cylinder is pivoted a bent lever, the long arm of which is provided with an adjusting screw, and the short arm with a copper pad, which can be forced with more or less pressure on the periphery of the friction wheel by adjusting the screws, so that by this means the resistance of the ratchet in the direction permitted by the form of its teeth under the pawl when riding or slipping over the ratchet teeth, and without having to depend on the tightening up of the stuffing box at the front end of the cylinder for the necessary friction on the piston rod.

A peculiarity and advantage in this machine is that in case of tion on the piston rod.

A peculiarity and advantage in this machine is that in case of

A peculiarity and advantage in this machine is that in case of obstructions caused by the jamming of pieces of stone between the side of the bore hole and the borer, &c., provision is made to prevent breakage under such circumstances. This consists in bending the pawl into a long U-shape, which thus forms a spring of sufficient stiffness not to give way under normal conditions, but when such obstructions occur as would be likely to cause breakage, if the drill were prevented from rotating the pawl will yield, and allow the ratchet wheel and piston rod and borer to rotate in a direction opposite to that which it takes under ordinary circumstances. The valve by which the steam is admitted into the cylinder is of the ordinary D, or locomotive type. At the back end of the cylinder casting a 1 shaped lever is higged or pivoted, the two side arms being curved somewhat downwards. On the extreme and of the

der casting a shaped lever is hinged or pivoted, the two side arms being curved somewhat downwards. On the extreme end of the piston rod is an enlargement, or tappet, which at both ends of the stroke come into contact with one of the side arms of the lever, the weight of the lever is such, however, that when the tappet strikes either of the side arms the momentum is such as to move or rotate lever piece through an arc much greater than would be the case if the tappet only moved very slowly. The vertical arm of the lever is connected by means of a long narrow connecting rod with the valve spindle, so that as the tappet atrkes the lever piece the valve is reversed. Owing, however, to the rapidity with which the tappet moves the lever piece is thrown so far back as to completely reverse the valve, and this is done so instantaneously that whilst the blow is struck with the fall presented. the valve, and this is done so instantaneously that whilst the blow is struck with the full presence of the compressed air on the back of the piston, the valve is reversed and the exhaust opened in time to allow of the rebound of the borer, piston rod, &c., taking place naturally, and is not hindered by the back pressure of the com-pressed air. The piston rod is of the same thickness at both sides of the piston; this is partly necessary on account of the mechanical arrangements for the gradual feed as the bore hole gets deeper.

GEOLOGICAL SOCIETY OF LONDON.

GEOLOGICAL SCOTERT OF LONDON.

Dec. 5—Prof. P. Martis Durgan, M.B., F.R.S. (President), in the chair.

Isaac Bayley Balfour, M.B., D.Sc., Inverteith-row, Edisburgh; D. Barns, Geological Survey of England, Jermyn-street; Samuel Cooke, M.A., Assoc. Inst. C.E., Professor of Chemistry and Geology, Poont Civil Engineering College, Bourbay; Henry Drummond, Glen Eim Lodge, Stirling; Sandford Fleming, C.M.G., M. Inst. C.E., Durham Villas, Kensington; Rev. John Hodgson, M.A., the Vicarage, Kinver, Staffordshire; William Etheldred Jennings, B.A., School of Mines, Sydney, New South Wales; Heary Merryweather, Fairholme, Clapham; Robert Rabinson, M. Inst. C.E., West-terrace, Darlington; Martin Stewart, B.A., York House, Wakefield; Geo. Eastlake Thoms Wolverhampton; Robert F. Tomes, Weston-on-Avon, Strafford-on-Avon; and Irwine John Whitty, M.Inst. C.E., of Giridhi, East Indian Railway, Bengal, were elected Fellows of the Society. — Ephraim Brunt, Havelock-place, Hanley, Staffordshire; T.W. Cowan, Horsham, Sussex; and Henry Fox, Clarendon-road, Victoria-road, Kensington, were proposed as Fellows of the Society. — William Fream, B.Sc., Lond., Professor of Natural History in the Royal Agricultural College, Cirencester; J. G. Hoobstätter Godfrey, late Chief Geologist and Mining Engineer to the Government of Japan, Elsa House, Dulwichroad, London; Herbert Goss, F.L.S., the Avenue, Surbiton Hill; Jenkin Jones Ingram, York-street, Lambeth; John Fowke Lancelot Rolleston, St. Peter's-terrace, Leicester; F. A. A. Simons, Manley-terrace, Kennington Park, will be balloted for as Fellows of the Society. The following communications were read: —

race, Kennington Park, will be balloted for as Fellows of the Society.
The following communications were read:

1.—"On the Building-up of the White Sinter Terraces of Roto-Mahana, New Zealand," by the Rev. Richard Abbay, M.A., F.G.S.

2.—"Additional Notes on the Dimetian and Pebidian Rocks of Pembrokeshire," by Henry Hicks, F.G.S.

3.—"On some Precambrian (Dimetian and Pebidian) Rocks in Caernarvonshire," by Henry Hicks, F.G.S.

4.—"On the Precambrian Rocks of Bangor," by Prof. T. McKenny Hughes, M.A., F.G.S.

SOUTH STAFFORDSHIRE INSTITUTE OF MINING ENGINEERS.

At the monthly meeting of members, held at the Midland Institute (Mr. Thos. Parton, F.G.S., presiding), a vote of thanks was passed to Mr. W. Blakemore for his three papers on the "Faults of the South Staffordshire Coal Field," after which the writer promised to lay his freshly-acquired knowledge of the green rock before the Institute at the annual meeting. His information related principally to the northern portion of the coal field.

treshy-acquired knowledge of the green rock before the Institute at the annual meeting. His information related principally to the northern portion of the coal field.

The PRESIDENT then read a paper on "Explosions in Mines." In opening the reader referred to the mines as non-fiery and fiery. In the former the main cause of explosion was want of sufficient ventilation in every working place in the mine. In fiery mines extraordinary means ought to be taken, such as the use of locked safety-lamps, and the non-use of gunpowder. When the wind was 8. or 8.8. W. mines were dampy. He need not say that the barometer was a friend to those working in mines, and showed that a fall of 1º reduced the pressure in exposed seams of 70 lb. to the square foot. But in the fiery mines of the North "blowers of gas" were so sudden, and came in such pressure as to overcome the most powerful ventilation, and exude itself against a high state of the barometer. Defective safety-lamps and the carelessness of the men were great causes of explosions in such mines. Another cause might be found in the manner of working out the mine to secure the greatest out-put in the shortest possible time. In a mine known to be dangerous, the "panel," the "pillar and stoop," the "pillar and stoop," the "pillar and stall," and "board and pillar" systems were unfavourable. Mr. Parton, then quoted Mr. Matthias Dunn and Mr. Warington Smyth as authorities for some of his statements, and said those who reviled owners and managers when an explosion occurred would be surprised to find the amount of money and skill expended to prevent such occurrences. Every day appliances were being invented or tested. Whilst owners and managers were thus doing their share the colliers ought to be taught to carefully study the conditions which contribute to explosions. Mr. Parton held that as the open spaces grew greater in mines the more care ought to be exercised. His paper was only a suggestive one, and he invited all interested to consider well the subject and record their ex

Drainage." He utterly condemned the statute which gave the power to drain the district. It had flooded more mines than it promised to drain, and the money raised had been extravagantly spent. He contended that the mode of appointing commissioners, arbitrators, and surveyors was wrong, and calculated to frustrate justice. The arbitrators know nothing of the district except what they were told, and, consequently, engines were being used to pump water where no good resulted. In some places owners paid the maximum rates and only one colliery was benefited. Then, again, rates were not properly "graduated" according to the circumstances applying to each mine. On the west watershed at Netherton, where ribs and pillars were being worked, a mine was rated at 1d. per ton. The Act was worked for individual interests, and not for the benefit of the whole community, many mines being hopelessly flooded, and the others having all the trade. Mr. Dunn urged that as there was a movement on foot for altering the Act there should be a sweeping change. The arbitrators should be removed and men appointed who knew the district; the Commissioners, whilst in office, should receive no pay for subsidised engines or other work. The boundary lines should be altered; each district should be free to appoint its own servants, levy its own rates, and work independently. If those reforms were carried out it was possible that a modified Act would do useful work; but, in his opinion, it was only in the most exceptional state of the coal trade that a Drainage Act could confer the alightest benefit on the district.—Votes of thanks were given to Mr. Parton and Mr. Dunn, and it was resolved to have the papers printed for circulation among the members.—Mr. A. C. Ress exhibited Tyndall's smoke respirator, which would enable a collier to work in choke damp, and thus extinguish fires. The invention elicited favourable expressions of opinion from the members present.

Society of Engineers.—At the twenty-third annual meeting, held on Monday (Mr. Thomas Cargill, President, in the chair), the following gentlemen were duly elected as the council and officers of the society for the year 1878:—As President: Mr. R. P. Spice.—As Vice-Presidents: Mr. C. Barnard, Mr. J. Bernays, and Mr. T. Porter.—As other members of council: Mr. J. Church, Mr. F. E. Duckham, Mr. F. W. Hartley, Mr. C. Horsley, Mr. A. Rigg, Mr. J. Walker, Mr. S. Cutler, and Mr. L. Perkins.—As Honorary Secretary and Treasurer: Mr. Alfred Williams; and as auditor, Mr. W. H. Bennett. It was announced by the President that the following premiums had been awarded by the council for papers read during the year:—To Mr. J. announced by the President that the following premiums had been awarded by the council for papers read during the year:—To Mr. J. W. Pearse for his paper on the "Mechanical Firing of Steam Boilers;" to Mr. Alfred Le Grand for his paper on "Tube Wells;" and to Mr. Ralph H. Tweddell for his paper on "Direct-Acting Hydraulic Machinery."—Votes of thanks were unanimously voted to the President and council for 1877; to the honorary secretary and treasurer, Mr. Alfred Williams; to the acting secretary, Mr. Perry F. Nursey; and to Mr. T. H. Martin and Mr. W. S. Wilkins for acting as scrutineers of the balloting lists. of the balloting lists.

TRANSMISSION OF POWER BY WIRE-ROPES.—The I. P. Morris Company, of Philadelphia, have just completed and shipped to the Calumet and Hecla Mining Gompany, Michigan, a full outlit of shafting and pulleys—or more properly sheaves—for wire-rope transmission. It is the largest apparatus of the kind ever built in this country. Two of the sheaves are 16 ft. in diameter, and as they are required to revolve at a high speed, are so accurately balanced that a weight of but a few counces was sufficient to turn them, while upon the balancing ways. The oatif comprises the following principal pieces:—Two sheaves of 15 ft. diameter, one of which is fitted with Weston's patent friction driving gear; four sheaves 10 ft. diameter.

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^{*} Being Notes on a Course of Lectures on Mining, delivered by Herr Bergrath Dr. Von Grondson. Director of the Royal Bergakatlemie, Clausthal, The Harz North Germany.

nets; 4 of 9 ft. diameter; and 6 of 10 ft. diameter. There are about 200 ft. of brief shafting, of from 4 to 8 in. diameter, and the necessary pillow-blocks for brief shafting, of from 4 to 8 in. diameter, and the necessary pillow-blocks for strying it. There is also a large heavy rimmed pulley 20 ft. diameter by 26 in. the shafting is made in eight segments, each of which has one arm, the end of the last being turned to fit into bored sockets in the hub-making as true and subgrandists wheel as if it were cast solid, and far safer, from the ab-ence of any shafting which is the shafting engines at the mines, and also we were two large governors for one of the hoisting engines at the mines, and a large amount of miscellaneous work, such as steam pipes, stop and safety nites, eastings for boiler furnaces.—American Manufacturer.

DETERMINATION OF ROCKS.

settings for boiler furnaces.—American Mennyfacturer.

Potably few subjects are of more general importance to practical mire than lithology, for the full knowledge of the scientific method interaction in the property of the setting for the property of the public of determining rocks will frequently save him much time and displant than lithology, for the full knowledge of the scientific method distribution of the property of the public of the setting of the public of the property of the public of the p

The who have already made some progress with the subject.

**A Golde to the Determination of Rocks; being an introduction to Lithology.

**By EDOUARD JANNETTAZ, D. Sc. Translated from the French. By Grongs W. Parwiron, C.E., M.A., Professor of Physical Science in the Polytechnic Institute, Brooklyn. New York: D. Van Nostrand, Murray and Warren-streets.

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Lesdon: Trübner and Co., Ludgate Hill.

Post-Office London Directorry.—Although the fact of the swenty-ninth annual edition of a work making its appearance would alone be ample evidence that its value was very widely appreciated, the careful examination of it would be not the less necessary in order to ascertain that its accuracy and other recommendations were maintained; and in the case of so elaborate a volume as the Post-Office London Directory, the accuracy and completeness of which is essential to its utility, it is desirable that the authors should know that their labours are minutely criticised, in order to prevent them from relaxing in their exertions to reach perfection. But the question is—What test can be most readily applied as a substitute for reading, since it must be acknowledged that had Messys. Kelly followed the example of D'Arcy Thompson, a witty Irishman, who wrote the best "Ladder to Latin" which is now extant, and commoneed their introduction to the Post Office London Directory with "Dear Readers! It less it hope I may address you in the plural number," their hope would probably not have been gratified, as few could be found with sufficient patience and generance to go through the whole 3081 pages of which the volume consists. But acqually safe conclusion can be arrived at by referring promisenously to a few dozen names, and ascertaining that they are accurately recorded, and then railing stuart Mill's inductive process of logic, or the metaphysical reasoning of Lat. Summer that if the conditioned exist the unconditioned must exist also, where we conclude that since it is shown that Mr. Pitzipions resides at Grove last-road, N. W.: Mr. Zitzienicki at New Cross-road; and that considerably more had if to their occupations and address es; therefore, the Directory, but it is suifactory to find that this year it has not been found necessary to introduce any less refutely to page and the particular processory these alterations and improvements in les printing, type, or arrangement (as to minor d

White writes on "Future Punishment." We call attention to this magazine be cause it is by far the ablest religious periodical of the day, pervaded by sound philosophy, and wholly unsectarian. The editor, Dr. Leask, is well known now as the author of a work which excited great curiosity, especially among literary men, "Struggles for Life," the pathos and spirit of which are brought prominently out by an elegant diction, which, indeed, characterises all the learned doctor's writings.

THE WHITWORTH PAPERS,—Three of Sir Joseph Whitworth's early papers—Plane Metallic Surfaces, and the Proper Mode of Preparing Them; A Uniform System of Screw Threads; and A Standard Decimal Measure of Length for Mechanical Engineering Work, &c.—have just been reprinted, with the author's consent, by Mr. John Calvert, of Jackson-street, Hulme, Manchester, in order to place them within the reach of every mechanic. The first paper was read before the British Association, at Glasgow, in 1840; the second was communicated to the Institution of Civil Engineers in the following year; and the third was read before the Institution of Mechanical Engineers, at Manchester, in 1857. The contents of the papers are widely known, and there can be little doubt that had the author had the wisdom to adopt the metric system when he was making the change his system would have been universally adopted, and he would have conferred a lasting benefit upon the mechanical industries of this country. The value of Mr. Calvert's reprint is much enhanced by the addition, by way of an appendix, of all the information required by intending competitors for the Whitworth scholarships.

CALVERT'S MECHANICS' ALMANACKS.—The reputation earned by the previous editions of these almanacks—Calvert's Mechanics' Almanack and Calvert's Street Memoranda and Calcular-will certrinly be maintained by those for the coming year—1878. The completeness and accuracy of the information given leaves nothing to be desired, and there are few who will not find in it something to learn. A cheap

Meetings of Public Companies.

ARUBA ISLAND GOLD MINING COMPANY.

ARUBA ISLAND GOLD MINING COMPANY.

A special general meeting of proprietors was held at the office of the company, Gresham House, Old Broad-street, on Thursday,

Mr. A. MACKENZIE (the secretary) read the notice convening the meeting, which stated that it was called "for the purpose of considering a certain agreement made between this company on the one part and Arthur Chaplin, E.q., of the other part," The secretary then read the agreement referred to in the notice.

Sir Charles Winoffeld saked if the sub-company would have any relations with the Dutch Government, or would they act through the old company?

The Charlman, in reply, stated that the company is acting under a power derived from the Dutch Government, its relations with which will remain undisturbed.

The Charlman then said: Gentlemen,—You have heard the agreement read, by which it is proposed that this company should use the authority it possesses, by its concessions from the Dutch Government, to establish on the island of Aruba a sub-company on sharing system to work this company's gold mines. I need not dwell on the position of this company; it is already well known to you all. The sub-company consists of a few of our leading bond and share holders—"faithful among the faithless found"—who have not wholly lost heart, and who are willing to make another venture. Owing to this circumstance we have been enabled to secure from these gentlemen terms which are very much more advantageous for us than would have been the case if they had been whilly, or for the most part, strangers to our interests. They desire, once for all, with their own money to test the value of our mines in a manner that will leave no possible doubt as to the accuracy of the results obtained, and we considered it was both the duty and the interest of this company to accede to the fair—indeed, I should say to the liberal—offer these gentlemen have been induced to make. I need for the ext-nion of operations, and the future development of the propess, and your sanction to the agreement

with them.
Sir C. WINGFIELD: I suppose most of the shareholders are bondholders?——The CHAIRMAN: No, indeed they are not.
The motion was carried unanimously, and the proceedings then

terminated.

PATELEY BRIDGE LEAD MINES AND SMELTING COMPANY.

sees midslined, and in the case of so elaborate a volume as the standard of the company of the c

weakness of the machinery, it was a fact well known to the shareholders, because nothing had been hidden from them, for it was only last winter that it was found mine altogether, owing to the extensive floods which then prevailed. There was a means of overcoming the difficulty, and the means recommended to be adopted were very simple, and necessitated only a very small outlar, Thesh archolders would imperative that a small aim of more the own a very gloony look, and it was imperative that a small aim of more the own a very gloony look, and it was imperative that a small aim of more the own a very gloony look, and it was they sent Oapt. Williams, of the Van, to inspect and report upon the prospects of this property; and Capt. Williams then stated that supposing this lode in the case of the control of the c

HUTCHINSON said it was all the way, but better in some places than in others. The 30 fm. level, going east, was driven for about 58 fathoms on the vein, and west in the same level 23 fathoms. They were now driving under the second sump, where there was good ore.

The report and accounts were then adopted.

The CHAIRMAN moved the election on the board of Mr. W. Baxter. He said that Mr. Baxter had been elected a director since the last meeting, and had proved a great strength and acquisition to the board.—Mr. F. W. Mansell seconded the resolution, which was put and carried.

Mr. F. W. Mansell then moved a cordial vote of thanks to Mr. Baxter for his kindness in consenting to become a director, and for his services to the company. He knew that Mr. Baxter had not only gone over the property himself, but had sent his own private agent over it, so that before joining the board be knew the value of the mine.

A SHAERHOLDER seconded the resolution, which was put and carried.

On the motion of the CHAIRMAN, seconded by Mr. HUTCHINSON, Mr. J. Carr was re elected a director.

Mr. JOHN CARR, in acknowledging his re election, said he considered the company in a very hopeful position. The mine was only in debt 1160l. at this moment, so that if they had no particular luck, and simply made the amount of monthly profit they were now doing, they would be able to do much more than that. He bore testimony to the great services which Mr. Baxter had redered to the company: that gentleman had come to the board at the period of greatest depression, and had become guarantee for a portion of the other ward and joined the loard after having investigated the position of the company. And having had a long conversation with the manager, he was fully satisfied with everything he had seen and heard, and believed they had a very fine property, which would be developed into a very great success. Whether it would be developed slowly was entirely in the hands of the shareholders. If the shareholders put the directors in a position to carry out th

WRST BASSET.—At the three-monthly meeting of shareholders, on Tuesday (Mr. J. C. Daubuz in the chair), the accounts showed a debit balance of 8891l. 5s, 2d. The loss on the three months' working was 195l. 1s, 8d. The total liabilities were 25,127l. 8s, 5d., as at the last meeting. The Chairman explained that the accounts had been audited by Mr. Mitchell, who was satisfied with all he had seen. Mr. Heard expressed himself satisfied with the accounts, and remarked that they were practically 1200l, better than at the last account. The Chairman said that was so. The committee were reducing the balance due to bankers as speedity as possible, and they had proceeded to do so during the past three months. Capt. Nicholls saw no reason why sufficient the should not be raised during the ensuing three months for pay cost. He gave r. satisfactory account of the mine generally. A call of 6s 3d. per share was raide; and after a long discussion on the refusal of the late Mr. Fortescue's ex-cutors to contribute to the adit repairing fund, the committee was authorised to subscribe 10-l. to that fund.

RICHMOND CONSOLIDATED MINING COMPANY.—The report of

64. 3d. per share was ruade; and after a long duession on the retusal of the air Mr. Fortescue's ex-outors to contribute to the adit repairing fund, the committee was authorised to subscribe 10-l. to that fund.

RICHMOND CONSOLIDATED MINING COMPANY.—The report of the directors to be presented at the general meeting of Friday states that on the day of the last general meeting (Aug. 23) the directors received a telegram from San Francisco, to the effect that the decision of the District Court was against the Richmond Company. Notice of appeal to the Supreme Court of the United States at Washington was thereupon given; considerable time elapsed before the findings of the Court were agreed upon; these findings will allow all questions of law and fact to be considered on the hearing of the appeal. Until the case is finally determined by the Supreme Court the company are restrained from working in the disputed ground. The Eureka Company claimed costs to the amount of \$17,000, which have been reduced by the Court to between \$200 and \$300. On appealing to the Supreme Court, the Richmond Company gave security for damages and future cost (if any found against them) to the extent in all of \$12,000, or 24001., which was deemed sufficient by the Court, not withstanding the exaggerated claims of the Eureka Company. There being a very large amount of business in the Appeal Court the directors are unable to give the shareholders at present any information as to the probable time when the case will come on for hearing. The furnaces were shut down on April 30, and put into thorough repair, the machinery was also thoroughly overhauled and put in order, but it was not considered desirable to recommence smelting until after the decision of the District Court was known. Explorations carried on vigorously in the mine in undisputed ground have developed large quantities of ore of high grade. Smelting was resumed on Sept. 5, and has been continued with highly satisfactory results; from that date to Dec. 9 they swelled 12,020 tons of or

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1877.

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[81,800].) The directors declared a dividend of 7s. 8d, per share on Nov. 6, payable on Nov. 10, and they fally expect to be able to continue the payment of dividends regularly every quarter, in addition to paying off the debenture unrunting to 18,800,, which fall due May 25. The commission is expected to arrive in England about January.

EXCHEQUES.—The report (dated Nov. 10) of Mr. Henry Sewell M.E., has been published, and with it the directors is ue a circula M.E. has been published, and with it the directors issue a circular inviting subscriptions for Fifteen Per Cent. Debenture Bonds, interest payable out of profits, "to extricate the company from its immediate monetary obligations." The American creditors' claims amount to \$500t., of which \$500t. is due to Mr. Chalmers, and does not press. The directors state that explorations may now be made in the mine itself effectively, rapidly, and economically. Any discoveries of rich ore can be in this manner utilised at once when greater depth is reached, everything outside the mine being in complete running order. Rich even if at present isolated ore shoots in existing levels, they think, be followed downwards into more compact and more richly mineralised ground; this can now be readily accomplished at a comparatively small cost. It is pointed out that a mine on the Comstock lode, 30 miles distant, has made a rich strike at 1900 ft. after being barren for many years, and that the Exchequer is only 400 ft. deep. It is stated that the Exchequer Mines possess unrivalled advantages as compared with the Comstock Mines. The Exchequer Company has 7000 linear feet on the Buckeye and Acada lodes; the laster is, perhaps, the more promising, and has not yet been tapped. The original cost of the lodes was 30,000f., and the total expenditure of the mines since the purchase has been 48,7471. The American creditors have agreed to take half their claims in cash, and the remainder in debentures, provided the remittance be prompt. Otherwise foreclosure will immediately take place, the property lost to the company, and pass into the hands of those who may reap the benefits arising from the shareholders' large outlays. The directors express their earnest hopes that by a liberal subscription the shareholders' large outlays.

he derestoned and in their endeavours to bring the mines into a permanently remunerative condition.

ALMADA AND TIRITO MINING COMPANY.—The directors'report, prepared for presentation at the meeting to be held on Friday next, states that the loss on the half-year's working was 886%. 4s. 3d.; including interest on debentures, 530%, and 59%. 11s. 5d. for depreciation on s-hooner and office furniture. The whole of the explorations &c. has been charged to revenue, except shaft sinking and construction of the lixiviation works, which has been charged to capital. The result of working the mines is gradually becoming more favourable. The process of treating the black cres by roasting and lixiviation has now been so far perfected by Mr. Breach that it has passed from being an experiment to an established and successful fact; and the hars of base buillon, the produce of this method, which have been received from the mines have realised satisfactory results. A second furnace is now being erected, and as there is an abundant supply of these ores, it appears very desirable to increase the number of furnaces, as any capital expended in this direction would at once command remunerative employment. The directors would express their opinion that the prospects of the mines are very much more encouraging than they have been for some time past, and that a judicious expenditure of money is all that is required to put the property again into a dividend paying condition. With a view of raising the necessary capital, it has been determined to issue the balance of the 15,000% debentures already authorised—4400%. The half-yearly interest of the 10,600% mortgage debentures at the rate of 10 per cent, per annum will be duly paid on Dec. 31. In the circular inviting subscriptions for the debenures the directors observe that as to the general prospects of the company's mines, it will be observed with satisfaction that Mr. Breach in his general report says—considering that the low-grade rebellious ores in the Mina Grande are now superior to

| For remainder of Meetings see to-day's Supplement.]

FOREIGN MINING AND METALLURGY.

FOREIGN MINING AND METALLURGY.

In the French iron trade working operations have been carried on upon a comparatively restricted scale, as few new orders have come to hand. Prices have begun to recede, merchants' iron having given way 10d. to 1s. 8d. per ton. This fall has occurred only in the Nord, and it can starcely be said to be general at present; so little business has, indeed, been done that it is difficult to give prices. Many French merchants and industrials have pointed out to the President of the French Republic that much injury is done to business and enterprise in France by the prolongation of the political anxieties and uncertainties which have so long weighed down the energies of the nation. French ironmasters do not appear to have taken much part in this rather general movement, although they must be suffering with the rest. The settlement of the treaties of commerce question appears to be postponed to the Greek Kalends. Free trade principles would seem, however, to be gaining a little ground in France, M. de Meaux, a free trader, having been just appointed a member of the Superior Council of Commerce. The proprietors of the Horme forges have decided on taking over the Buire works, near Lyons.

The state of the French coal trade remains unchanged. The weather has continued mild and rainy, and this circumstance has, of course, had some effect upon the demand for domestic qualities. As regards industrial qualities of coal, the demand for them has exhibited considerable stagnation, and this stagnation can only disappear when the industrial crisis terminates. In the absence of any striking trade news the French industrial journals are occupying themselves a good deal at present with the somewhat stale indus-

appear when the industrial crisis terminates. In the absence of any striking trade news the French industrial journals are occupying themselves a good deal at present with the somewhat stale industrial statistics of 1872. French statistics are generally rather dilatory, and these returns are the latest which are at present available. In the French coal mining districts the situation naturally occasions a good deal of dissatisfaction and uneasiness. As freights have fallen, some boats have been loaded, so as to diminish stocks and to easily supplies to be available for the first front. This is, however.

fallen, some boats have been loaded, so as to diminish stocks and to enable supplies to be available for the first frosts. This is, however, an almost useless proceeding so far as Paris is concerned, as the coal warehouses of that capital are 'already full. In the Basin of the Loire short time has been introduced at some pits.

The Belgian co. I trade exhibits little or no animation. Sales are only taking place upon a reduced scale, and the extraction has been also curtailed to some extent. As regards prices, deliveries and contracts the situation remains generally unchanged. The present troubled aspect of French politics greatly checks business upon that mirket; scarcely anyone dare undertake large operations, the future leing so uncertain. This indecision of the French commercial world exercises an unfortunate influence on operations in the Belgian coal teing so uncertain. This indecision of the French commercial world exercises an unfortunate influence on operations in the Belgian coal trade and other branches also of Belgian enterprise. All that Belgian coalowners can do is to wait patiently for better times. M. Bourier claims the credit of having invented the machinery in operation at the works of MM. Debaynin, at the Hasard, for the production of

agglomerates.

aggiomerates.

The orders received by the Belgian iron trade are not sufficiently large to exert any influence upon prices; at the same time they induce an anticipation that a certain activity will prevail in the rolling mills during the winter, so that industrials will be enabled to go on tolerably during the winter, so that industrials will be enabled to go on tolerably patiently until the spring. It remains to be seen whether this anticipation is of too sanguine a character. The Dyle Workshops Company has just received an order for 50 coal wagons of 12 tons each carrying capacity, for the Cuidad Real and Badajoz Railway. A contract has just been let for the construction of market buildings at Ixelles-les-Buxelles; the lowest tender submitted was 25,4244. A good deal of iron will be introduced into the new luildings, as they will have an iron roof, iron columns, &c. M. Arthur Laurent has just published an industrial map of the Mons district—that is, a map showing all its industrial works, coal pits &c. The direction of State railways is about to let at Frankfort- in the-Maine a contract for 1300 tons of Bessemer steel rails, 12,000 fish-plates, and a corresponding quantity of other minor accessories. A few days later the directors of the Westphalian Railway will open tenestphalian Railway will ders for 1800 tons of cast-steel rails, 1000 tons of iron sleepers, and 500 tons of accessories. The direction of the State railways at Hanover is about to let a contract for 12,000 iron sleepers, and the parameter is about to let a contract for L2,000 from seepers, and the direction of the Rhenish Rail way, at Cologne, is about to order seven passenger locomotives. The German railways, it will be observed, are adopting to a still further extent the system of a metallic infrastructure. It is noticed that German, Belgian, or French steel rails have of late displaced English steel rails upon the Italian railways. Shipments of rails for Italy can now be made very readily and advantageously from Antwery. Botterday, and Hamburg, and this sampheness of rails for lady can now be made very readily and advantageously from Antwerp, Rotterdam, and Hamburg, and this has, probably, something to do with the result indicated. M. Smits, managing director of the Couillet Company, has died in the course of the last few days. The loss of M. Smits will be severely felt.

At the Auction Mart, Mr. Elwin Fox and Bousfield sold one-fifth part of a King's Freehold Share in the New Rwar at 19,240%, or at the rate of 96,200% pershare. They also sold 18 New River Company's New Shares of 100% each, fully paid, for 5590%, or an average of 310/. 11s. er ch.

Original Correspondence.

NICKEL, AND NICKEL COINAGE.

NICKEL, AND NICKEL COINAGE.

Sin,—During a recent visit to the United States I saw some very elegant little coins, of which I was informed nickel was the principal ingredient, although they were so totally unlike the dull and unwholesome looking nickel coins of Switzerland that I was inclined to doubt whether there was not some admixture of silver in the American coins. As I was unable to obtain particulars, I should esteem it a great favour if some correspondent would state the proportions in which the metals are mixed, the method of mixing, and the mode in which the great brilliancy is secured. The lightness of the bronze coinage, which has been substituted for the copper in England is, no doubt, a great recommendation, although the inferiority of the English bronze as compared with the French bonze must have struck everyone; and a still further advance would be made were nickel coins substituted for the bronze. A sovereign's worth of nickel change would not weigh more than one-twelfth that of bronze change, and the introduction of it would open out quite a new industry.

Some friends of mine are interested in a property which, according the substituted for the bronze of interested in the substitute of its worth of nickel change would not weigh more than one-twelfth that of bronze change, and the introduction of it would open out quite a new industry.

out quite a new industry.

Some friends of mine are interested in a property which, according to the analysis of Prof. W. White, yields an abundance of nickel ore of the Eisennickelkies class, carrying from 12 to 15 per cent. of the metal; but it seems that at present there is great diffiulty in selling it, except by private negociation, in which there is reason to believe that the miner does not receive his fair proportion of the value. The metal nickel is not even mentioned in Mr. Hunt's Official Mineral Statistics for 1876, which have recently been published, and Leapnot leavn that there are any require purphasers of Ometal Mineral Statistics for 1876, which have recently been published, and I cannot learn that there are any regular purchasers of nickel ores, even if they were ordered. Both Williamson, of the Goldenhill Nickel Works, in Staffordshire, and Barker, of Birmingham, seem to have ceased to deal in them, for I now never see their names mentioned. I believe that there are nickel deposits both in Cornwall and Scotland, which could be turned to good account if there were an open market for the ores and an established system of having.

there were an open market for the ores and an established system of buying.

What we want to know is how much the returning charges would be for smelting the ore, and what is the real market price of the metal? I am told it is only sold by the pound—5s. to 5s. 6d. per lb. being the price charged—and that, therefore, a ton of ore can only be taken at purchaser's price, and on the risk of his "having to hold it for years." From the large quantity of nickel that must be used, seeing how common white metal has become, this cannot be true, so that miners themselves should make a stir in the matter. There are very few producers of nickel ores, I suppose, so that there would be no difficulty in their coming to a common agreement not to allow more than 10th returning charges. The result of this would be that, taking the metal at the mean price, 5s. 3d. per lb.—that is 588t. per ton—the miner would receive for 5 per cent. ore 19t. 8s. per ton, and for (say) 1th per cent. ore 7th, per ton. Now, this I am assured the miner does not get, and that 10 per cent. ore has had to be sold for 35t, per ton; whilst, allowing 10th returning charges as above stated, he should receive 48t, 16s. per ton. This difference of 13t. 16s. per ton is absolute loss to the miner, and is entirely due to his not knowing where to sell his ore, so that he has to deal through bargain buyers.

J. H. C. Truro, Dec. 10. Truro, Dec. 10.

LEAD MINING IN KESWICK DISTRICT, CUMBERLAND.

SIR,—The Brandlehow Mine, like its rich rival neighbour, Goldscope, has been wrought from dates immemorial (long before the manufacture of gunpowder), and from those remote ages to 1864 this mine continued to produce enormous quantities of ore—a rich and profitable undertaking. The mine is situated at Newlands, Keswick. The strata formation known as the Skiddaw range of clay-slates is of soft nature, which admits of quick development. The lodes are large and masterly, varying from 2 ft. to 8 ft. wide. Gold was found to exist in the Brandlehow vein, most abundant in the gossan or surface outcrop, and in such quantities that well paid for extraction; other rare minerals were also found to exist in this mine, but not in sufficient quantity to pay the miner. Silver-lead was the principal mineral sought, and was found in large bodies.

The lodes in this mine, as also other lodes of the district, were operated on by the old men wherever seen cropping out to the sur-SIR.—The BRANDLEHOW MINE, like its rich rival neighbour,

The lodes in this mine, as also other lodes of the district, were operated on by the old men wherever seen cropping out to the surface. The backs of these veins have in many instances been bared by large streams of water flowing down the mountain side. From the operations thus made large returns of ore were derived. These facts are gathered from records which still exist. The miners of those ages experienced great difficulty in exhausting the ore. The sudden influx of water was sometimes caused by the operators meeting with a spring or fissure of water while working; other times they were driven out of their pits by the large flow of water coming down the mountain during the wet season.

Notwithstanding all these disadvantages large returns were made, which tends to show the great productiveness of the veins: indeed.

which tends to show the great productiveness of the veins; indeed, so great was the mineral production of this district that large smelting-works of both lead and copper were erected, and the smelting ing-works of both lead and copper were erected, and the smelting of silver-lead and copper ores was carried out on a large scale.

The mineral supply to these furnaces were the produce of this and neighbouring mines, although the mine before our readers supplied the largest quantity of lead ore, which was rich in silver—large fortunes were amassed both by the miner and smelter. The Brandle-how Mine has been, perhaps, more extensively wrought than any mine in the district. Although only sunk to the depth of 50 fms. below the main adit, the levels are extended long distances, upwards of 300 fms. in length on the course of the vains.

of 300 fms. in length on the course of the veins.

These long lengths of levels did consist of almost inexhaustible supplies of ore. They were found in such large bodies that the term deposits is better applied than either bunches or pipes of orehence the wealth of this large and important mineral field. Notwithstanding the wealth of this mine, and the immensely large profits which have accreted to its fortunits abayeholders resulting from fits which have accrued to its fortunate shareholders, resulting from operations between the main adit level and the surface, results of almost equal importance were obtained from the deeper workings. almost equal importance were obtained from the deeper workings. In the latter period of operations in the mine a large spring of water was come upon, the flow of which was 180 to 200 gallons per minute. Although this mine is situated about 25 miles inland from the nearest point of the sea-shore, yet this powerful spring of water contains about 15 per cent. of chloride of sodium. The bottom of the shaft (the 50) is in a rich vein, some parts of which are fully 2 ft. wide, solid galena. The day is near at hand when this large field for mining industry will awake from the slumber which has rested upon it the last few years.

Tourist.

OLD TREBURGETT SILVER LEAD MINE.

SIR,-I cannot but think that the mining community and those who "know the district," were sufficiently convinced by my letter, if, by nothing else, of the impracticability of "The Miners of Old Treburgett" themselves being in a position "to work the mine not for a few weeks only but for 12 months, in a straightforward and burgett" themselves being in a position "to work the mine not for a few weeks only but for 12 months, in a straightforward and miner-like manner;" but as my letter has been replied to by them (?) I will adduce a few more facts which may set their minds at rest, although it is really a waste of time. There appears to me, however, a certain amount of animus pervading their correspondence, which is inexplicable. That the miners should be two months' pay in arrar is to be exceedingly regretted, and is quite sufficient to make them irate; but they should not forget that some of the largest shareholders have lost in the undertaking not only two months' wages, but the earnings of many years, which has been partly caused by the exacting conduct of the lords. They have acted throughout as is well known, in the most liliberal masner; and had it not been for the ill advised course adopted by them in distraining further exorbitant dues when the company was in difficulties, I believe that the mine would have pulled through, the shareholders would have retained their interest, and the miners received their wages. But this could only have been done by the expenditure of fresh capital, which would proper spirit. My advise to them is—if ever they get an offer to work the setter to grant at such a rate of dues as would be for the benefit of all concerned. They, and those who reperent them, are sufficiently conversant with the present position of the mine to realise the absurdity of the offer of the miners, for if they could work the mine themselves surely the lords could of likewise; but they realise the necessity of fresh capital being raised to develope the concern, and consequently treat the offer with indifference. What guarantee, for ooth, could the miners give "to work the mine in a straightforward and miner-like manner?" They surely must "dream "that they are "prepared," if I understand the mean-

and "dig the eyes of the minister I have been at some tample in age from a reliable source that I was correct in assuming that "The Miners of burget" were really only a few of them—in fact, about half-a-dozen me who were not allowed, and rightly so, to have priority over their fellow in respect of their wages. A large portion of the miners have left then hood, and some are still employed at the mine; but I will, if the disaffect wish it, in a future letter publish their names. They are aiming to be instead of employees, in order, if possible, to take matters into their instead of employees, in order, if possible, to take matters into their own business" and advice to them is to "mind their own business" making base insinuations against those in whom the company had every example.

LLANRWST LEAD MINING COMPANY.

LLANRWST LEAD MINING COMPANY.

SIR.—Doubtless ere this every shareholder in the Llanrwat Lead Mining Company, East Craven Moor, and West Craven Moorhas been supplied gratuitously with Messrs, Granville and Gould Sharpi circulars, which circulars are libellous throughout, an imirepresenting the value and importance of this undertaking; their figures are totally at variance with the company's statement of accounts. The annual meeting, which will shortly take place, will show a highly satisfactory afternet one and all of the shareholders (and will take the wind out of their salies), not only from the highly prosperous condition of the mine, but the salies are consistent of the company. The directors whilst protecting the shareholder factory position of the company in litigation, notwitismed the salies interest have no desire to involve the company in litigation, notwitismed with the salies of the company of the salies of the sali

THE GRAND PRIZE OF 1877-ESGAIR-FRAITH.

THE GRAND PRIZE OF 1877—ESGAIR-FRAITH.

Str.,—The greatest discovery made in this county in 1877, or for many years past, is at Esgair-Fraith Copper Mine, belonging to the Cambrian Mining Company, by sinking the engine-shaft under the 10 fm. level, down deep enough to extend to a 22 fm. level, or (say) by 12 fms. of sinking. It was found by sinking the shaft the ordinary width (6 ft.), in which the vein was of the richest character, and worth fully 100£, per fathom, that, when ground had to be cut for plat and putting in custern, &o., a very valuable portion of the lode was still standing to the north, and this it was thought advisable to strip down, as it would standing to the north, and this five a strip down, as it would facilitate matters for easing and dividing the shaft, for drawing and other purposes. When, however, the second rich portion was stripped down, good copper was still found standing to the north, and, the opening on the lode being very wide, men were put to strip the third portion of the lode down. The lode at or near the sastern shaft varies from 30 to 5 fft, wide—that is the copper par of it; but there is a large lode still standing north, which will be found productive for lead or, a winze has also been sunk west of the engine shaft, under the lofm level, for 6 fms., and this part of the lode has been valued at 50% per fathom. It will be satisfactory to learn what the real value of the ore produced from the 12 fms. of sinking will absolutely realise at the 8 wasses Tokedings. And I hope that this company will give publicity to each sale, which I am convinced will more than bear out all the valuations that have been placed on them. This immense man for ore is caused by the junction of the Esgair. Hie proper with the Blane Caleal lode very near the copper shaft, which is now being drained to the 20, and which is distant from Esgair-Fraith engine shaft 40 fms., and where there is a rich lode both for copper and lead. From this point eastward such a mass of ore mustical side of the company is

FLAGSTAFF SILVER MINING COMPANY OF UTAH.

SIR,—A paragraph having appeared in last week's Journal giving

FLAGSTAFF SILVER MINING COMPANY OF UTAH.

SIR,—A paragraph having appeared in last week's Journal giving what professed to be an account of the proceedings at a private meeting of the promissory note and debenture holders of this company, I am directed by the board to request you to be good enough to give insertion to the following report from the minute-book of this company, an approved by the board, and recorded on their minutes:—The Chairman brought up the report of the meeting of debenture and promissory note holders, held in pursuance of the circular of Dec. I, as follows:—The Chairman brought up the report of the meeting of debenture and promissory note holders, held in pursuance of the circular of Dec. I, as follows:—The Chairman marrated the past history of the company, and showed that a more moderate estimate of the productive power of the mine than that hithertoacepse, and the productive power of the mine than that hithertoacepse, on the statements and reports of Mr. Vincent, should in future of adopted. The lesses had had serious difficulties to contend with in the depressed state of the markets, aution and in some of the suits the decisions of the strict was continued to the company. He stated that the accounts received as to the worked of the mine were satisfactory, and there was reason to expect a steady yield for the future. The last advices from the manager were referred to as confirmatory of this view, and the letter on the subject, which had arrived the day immediately preceding the meeting, and which the Chairman had not seen, was read to the meeting, and generally approved.

The Chairman next pointed out that despite the various appeals made to the shareholders to take serious note of the embarrassment of the company, and aloid of dobt accumulated during past administrations, they had shown an advice of the state of affairs, and that by not availing themselves to the state of affairs, and that by not availing themselves to the state of affairs, and that by not availing themselves to the stat

FLAGSTAFF MINING COMPANY.

SIR,—At the meeting of Flagstaff debenture and promisery note holders, held at the Cannon Street Hotel on the 7th inst., Mr. W. C. Harvey (the chairman), in attempting to extricate himself from the grave difficulties in which he found himself involved, due to certain latters which he had confered (the context of the con grave difficulties in which he found himself involved, due to certain letters which he had confessed (to parties present at the meeting) he had written to Mr. Hunter, with a view to eccuring a portion of the profits of the lease granted to the latter, attempted (as a sort of counter irritant) to fix a stain upon my character (perhaps my professional character, as well as that of a director of the Flagstaff Company), and in doing so most dishonourably alluded to a transaction which I had with a certain firm of prominence in London, and which transaction resulted from a casual acquaintace I formed with the senior partner of the firm on a voyage from New York months before I ever even thought of joining the Flagstaff board. The suggestion to buy some shares in both the Flagstaff and New Quebrada Companies (which was done) came from a member of the firm, and was with the object (as regarded the former) of holding them till they reached at least 55. per share. This is my mind could in no way affect the interests of any of the shareholders, except for good, at the shareholders, except for good, at the shareholders are the same time, every share of which I hold to this day. The Flagstaff shares at the same time, every share of which I hold to this day. The firm alluded to did sell out their shares, but wholly against my will, and made a large profit, of which I did receive a relatively very small portion, but helder touching one farthing of the money I laid the transaction, with all its divensations of the property of the circumstance, my acceptance of it. I may add that I have always entertained the circumstance, my acceptance of it. I may add that I have always entertained he highest opi

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THE gent by Mr. dated the 11 eived one. ceived one, having enter believing them, wants honesty the shareholds should suppose were not able surces that he competent are personally to a marly 300 shareholds.

ST. JOHN oits. per to DON PEDR

DON PEDress, &c., will aplained in no dis are completely then be sightest difference cuts, &c. rawing the word not have at us the safet when the safet when the safet with the safet with the safet when the safet when the safet when the safet was the safet when the safet when the safet was the safet when the safet when the safet was the safet when the safet was the safet when the safet when the safet was the safet was the safet when the safet was the safet wa

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the highest opinion of the merits of the Flagstaff Mine, but am compelled to content my conviction that it has never been given a fair chance to prove its remunenise character, owing to a want of proper management at home and abroadmite character, owing to a want of proper management at home and abroadmite character, owing to a want of proper management at home and abroadmite the superior of the management and the superior of the supe

THE FLAGSTAFF SILVER MINING COMPANY.

THE FLAGSTAFF SILVER MINING COMPANY.

Sir,—I have only this afternoon seen accidentally the circular set by Mr. J. Garne and Mr. M. C. Vincent to the shareholders, set by Mr. J. Garne and Am. A. C. Vincent to the shareholders, dided the 11th inst., and am at a loss to know why I have not regired one, as my name has been on the register for several years, saving entered the company by purchasing shares at 15t. each, being then, as I do now, that intrinsically it is a valuable property, and only being honesty and moderate ability combined to develop it, to the great benefit of said honesty and moderate ability combined to develop it, to the great benefit of said honest hand for a local would not have issued it if they should suppose that the siguers of the circular would not have issued it if they should shop to the company into the said of the company into the said of the said of the company into suppose that the has been striving hard for a long time to get the company into suppose that the has been striving hard for a long time to get the company into suppose that the has been striving hard for a long time to get the company into suppose that the has been striving hard for a long time to get the company into suppose that the has been striving hard for a long time to get the company into suppose that the has been striving hard for a long time to get the company into suppose the suppose that he has been striving hard for a long time to get the company into suppose the suppose that he has been striving hard for a long time to get the company into the suppose the sup

CAPE COPPER MINING COMPANY.—At a meeting of the directors, M on Tue-day, it was resolved that a dividend of 17s. 6d. per share, free of some tax, be decared, payable on Dec. 24.

57, JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro the ll: Produce for the month of November, 42,500 cits.=16,400.; yield

C.PE COPPER MINING COMPANY—At a meeting of the directors, bit of Treeday, it was resolved that a dividend of 15. 63. per share, free of bit of Treeday, it was resolved that a dividend of 15. 64. per share, free of the care of the control of the c

wek and doing well. Health is good, labour abundant, and the whole mine is itself to be in first-rate repair.

BUE TENT.—D. T. Hughes, Nov. 17: We have had some rain during the wek, but it falls so gradual when it does rain that it is absorbed by the ground imediately, and has not furnished us with any water to wash yet. To day after anisy reterilay we had 600 in. of water in our ditch for a few hours only. The full Yala Canal Company has none in their ditch yet this season. We are blough with all improvements except the completion of the upper bank of the reservoir, which is fast drawing to a close. We set off four blasts with over loss of powder in all on the 14th at the South Yuhu claim, one large one and bless mail ones. All -etof simultaneously with the most excellent results. We see to commence.

ato commence.

Stock out in the smoke stack shaft above the 4th or tunnel level. Two is broke out in the smoke stack shaft above the 4th or tunnel level. Two is broke out in the smoke stack shaft above the 4th or tunnel level. Two is broke out in the smoke stack shaft above the 4th or tunnel level. Two is prescribed in the smoke stack shaft above the 4th or tunnel level. Two is prescribed in the smoke stack shaft above the 4th or tunnel level. Two is man, was on the spot, and no time was lost in endeavouring to extinguish the class of the small shaft s RADO UNITED.—G. M. Henty, Nov. 21: On Sunday morning at 5 A.M.

Inter, have taken down a good deal of rock from side of esgine-room, and are
EURITARD AND ADOITA.—Civit with the Resert on terminise.
EURITARD AND ADOITA.—Civit with the Resert of the commission of the Commissi

about 6 dwts. per ton. No. 1 stopes, in the back of Intermediate level south, are producing 12 tons to the fathom, worth 7 dwts, per ton. No. 2 stope, in the side of the same level, on the flat part of the lode, is preducing 14 tons to the fathom, and worth 8 dwts, per 10 n. No. 2 stope 1 the lode in the rise is producing 12 tons to the fathom, worth ab at 5 dwts. to the ton.—Flat and New Lodes: In the end south, in Zero level, on the so-called caunter branch, the lode is now producing 1 ton to the fathom, worth as per mil! trial 4 dwts. 14 grs. of sponge gold per ton; this end bids fair for a further in-provement. In No. 2 level end, north of the 4th cross-out, on the flat lode, the lode is small and poor, but we are looking forward to an improvement in this end shortly at the junction of Robert's lode. We have communicated the rise south of the sith coss-out, on the flat lode, the not shortly at the junction of Robert's lode. We have communicated the rise south of the sith coss-out, on the flat lode, to not lot intermediate drive above, thus preparing for stoping. The stopes south of the rise, on this lode, are producing 4 tons of ore per fathom, worth 10 dwts. per ton. In the north end of the stopes, under No. 2 level, and south of the 4th cross-out, on the turn of the flat lode, the lote is producing shout 10 tons per fathom, worth 8 dwts, per ton. No. 2 level, south of the lat cross-out, on the flat lode, is communicated to an old level. On the 1st of the present month we commenced a new stope on this lode behind the drive, which is producing 10 tons to the fathom, worth 8 dwts. per ton. The stopes is the east side of this Intermediate drive are producing 10 tons per fathom, worth 8 dwts. per ton. The stopes is the east side of this Intermediate drive are producing 10 tons per fathom, worth 8 dwts. per ton. The lode south of first cross out, on a branch of the new lode, is producing about 10 ton for per fathom.—District Pestarena: In the 100 end driving north the lode is yielding 8 in the present end 1½ to

worth, as per small mill trial, 2 oz. 18 dwts. of sponge gold per ton. In the 90 end north the lode is yielding 3½ tons of ore per fathom, worth 18 dwts. 9 grs. per ton. The winze in this level is yielding 4 tons per fathom, worth, as per small mill trial, 1 oz., 1 dwt. 14 grs. per ton. The stopes in the back of this same level are producing 8 tons per fathom, worth, as per small mill trial, 1 oz., 1 dwts. 4 grs. The 90 end south is yielding 6 tons per fathom, worth, as per small mill trial, 1 oz., 14 dwts. 4 grs. The 90 end south is yielding 6 tons per fathom, worth, as per small mill trial, 1 oz., 12 dwts. 6 grs. per ton. The stopes in the back of this level yield 7 tons of good quality ore per fm. A picked sample or ore from this stope gave, by the small mill trial, at the rate of 9 ozs. 13 dwts. 9 grs. of sponge gold per ton. In the so the better will take place before long. This stopes in the back of this level sin the better will take place before long. This stopes in the back of this level are yielding 6 tons to the fathom, worth, as per small mill trial, 1 oz., 1 dwt. 6 gr., to the ton.—Acquavite Department: The stopes in the back of the 55 are yielding 6 tons to the fathom, worth 10 dwts. 21 grs. per ton. The stopes in the back of the 35 are yielding 6 tons per fathom, worth 10 dwts. 21 grs. per ton. The stopes in the back of the 35 are yielding 6 tons per fathom, worth 12 dwts. 21 grs. per ton. We have suspended stoping here for the present, and resumed driving the 53 end north.—Surface: Good progress is being made in putting up the hoppers and laying mercury troughs, &c., to the new mills.

CONDES.—James Seccombe, Oct. 36: Since my last report I am glay to say the weath-r has contine-d favourable, and consequently operations have progressed with vigour. During the past week we have loaded at the mines on an average lob miles per day; as nearly as I can judge we must have about 50 mules working for us. From the 1st to the 25th of this month we dispatched 80 tons of Santiago and 60 tons seconds to the

THE VAN MINES-MONTHLY REPORT.

THE VAN MINES—MONTHLY REPORT.

Dec. 12.—As under I beg to hand you my monthly report and setting list:—Seaham's shaft is down 10 fms. I ft. below the 105, and is now sus, ended owing to an outburst of water from the lode. The bottom of the shaft is in the bastar I lode, and I expect by the time the shaft reaches the 120 the north side of it will t such the main lode. The 10 in, lift is provided us this day week from Sandy Croft, and as soon as it arrives we shall fix it, and commence sinking again. The cross cut at the end of the 105 east is driven by ft 6 in, thus proving the lode to be very wide at this point; but in the last 10 ft. 6 in crossed we found in lead of value, only a strong lode. We have this month resumed the driving of the 105 east by side of the lode with four men at 30s, per fathom. The 105 is driven west of shaft at 4 fm;; the lode in the present is worth 25, per cubic fathom for lead ore; set to six men at 23s, per lathom. We are now within about 6 ft. of getting and ye with lorded or 22l, per cubic fathom, and is now within about 6 ft. of getting upon main leader, west of shaft, is worth 37l, per cubic fathom; set to six men at 10s, per fathom. The stripping of the lode to full width in the slie of this level at a point about 55 fms. west of shaft, is set to six men at 10s, per fathom. The stripping of the lode to full width in the slie of this level at point about 55 fms. west of shaft, is set to six men at 10s, per fathom. The 30 fm. level stope, to eight men, at 50s, per fathom. The 40 fm. level stope, to eight men, at 50s, to per fathom. The 10 fm. level stope, to eight men, at 50s, to per fathom. The 20 fm. level stope, to eight men, at 50s, to per fathom. The 10 fm. level east tope, to eight at 60s, per fathom. The 20 fm. level stope, to eight men, at 50s, per fathom. The stripping of the lode to the full wiith in the side of the 90s, at a point 30 fms. east of shaft, is set to eight men, at 50s, per fathom. The 20 fm level stope, to eight men, at 50s, per fathom. The 30 fm level stop

Registration of New Companies.

The following joint-stock companies have been duly registered: --

The following joint-stock companies have been duly registered:—HALKYN LEAD MINING COMPANY (Limited).—Capital 20,000%, in shares of 124. 10s. each. To carry on mining operations in the parish of Yaccining, Flint. The subscribers are—J. Davies, jun., Mold, mining engineer, 15; Thos. Prime, jun., North Wood-street, Birmingham, 10: F. Empson, H. udsworth, architect, 10: T. Andrews, Moseley road, Woreestershire, manufacturer, 1; J. W. Rylance, Bull-street, Birmingham, factor; W. H. Pridmore, Han isworth, merchant; W. Thomas, King's Heath, Woreestershire, solicitor, 10: The directors are—Messra. F. Empson, T. Prime, jun., H. G. Roberts, and W. Thomas, the qualification being the holding of 20 shares.

BETTWS Y COED LEAD MINING ASSOCIATION(Limited).—Capital 30,000%, B. H. Shares, of which 13,200 are to issued as fully paid. To acquire the lease of mineral property situate in the towaship of Gwydir, Carnarvon, together with the building and machinery, according to the terms of a lease marke between K. O. Davies, C. J. Sims, and John Pauli. The subscribers are—E. Wootton, Acada House, Taunton, 200; C. W. C. Oldfield, South Warnborough Lodge, Winchfield, gentleman, 250; C. J. Sims, Chollacott, Tavistock, mineowner, 5.0; J. C. Brown, Milverton, Somerset, draper, 250; J. James Backpitt, Lurel Cottage, Tunton, 50; R. Barnicott, 44, Fore-street, Taunton, bookseller, 300; A. Barnicott, Forestreet, Taunton, stationer, 200. The qualification for a director is shares to time value of 250.

Milverton, Somersee, draper, 280; James Bobspin, Indirect Octage, 1d. Iron, 50; R. Barnicott, 44, Fore-street, Taunton, bookseller, 300; A. Barnicott, Forestreet, Taunton, stationer, 200. The qualification for a director is shares to the value of 2504.

RIO GRANDE AND DOLOFES SILVER MINING COMPANY (Limited).—Capital 10,0001, in 104. shares. To carry out an agreement made between G. T. Smith and A. S. Hughes for the acquisition of mining property in Mexico. The subscribers are—James Perry, C.E., 103, Cannon street, 49; C. F. D. Kierz Kowski, C.E., Collingham-road, S.W., 20; T. T. Cutbill, C. E., It'3, Cannon street, 15; U. de Lungo, 103, Cannon-street, nerchant; 20; W. J. Cutbill, 103, Cannon-street, merchant; A. S. Cutbill, North Oray, shipbroker, 20; R. Cutbill, 103, Cannon-street, 29; G. M. Tolkard, 14, Frinces Hill road, N.W., 20; A. S. Hughes, Penn-road Villa, Holloway, accountant, 5; C. S. Hill, Oak Grange, Beckenham. The directors are Messrs. W. J. Outbill, U. de Lungo, C. S. Hill, and C. F. de Kierz Rowski, the qualification being 10 shares. The remuneration is to be 200; per annum, and 5 per cent, on the profits to be divided.

PINTSCH'S PATENT LIGHTING COMPANY (Limited).—C. spital 250,0001, per annum, and 5 per cent, on the profits to be divided.

PINTSCH'S PATENT LIGHTING COMPANY (Limited).—C. spital 250,0001, in 51, shares. To acquire the right to work certain patented rights in connection with a system of lighting by oil gas at present belonging to the firm of Pintsche, Pesohon, and Co., of Viotoria Chambers, also to take over the business contracts of that firm. The subscribers are —H. J. Barr, East Grimstead; W. B. Rickman, 4, Esser-court, Temple; R. Milburn, Stanmore Lodge, Lower Tulschill; J. P. T. Adams, 57, Coleman-street; N. D. L. Grovenor, 25, Parkestreet.

YATE COLLIERES AND LIME WORKS COMPANY (Limited).—Capital 25,0001, in 20t. shares. To acquire certain collieries lately belonging to and works of the firm. The subscribers are —John Snow, Upper Railway Marf, Bristol, coal merchant, 15, Fra

HOLLOWAY'S PILLS—A REMEDY FOR BILIOUS AND LIVER COM-PLAINTS.—Those who suffer from bile and liver complaints should try the effects of this valuable remedy, a few doses of which will make the sufferer feel clastic and vigorous, remove all impurities, give a healthy action to the liver, and strengthen the stomach. It bilious attacks be allowed to continue without using such a pre-ventative more serious casualties may arise, and the sufferer be consigned to a bed of sickness. Holloway's pills are an extraordinary remedy, ac ing immediately in the removal of acidity of the stomach, indigestion, debility, and nauses, preparing the food thoroughly for assimilation, rendering each tributary organ perfect in its function, and stimulating the kidneys

WATSON BROTHERS' MINING CIRCULAR.

Ten years ago the weekly information which had previously been published for a great number of years in WATSON BROTHERS' Mining Circular was transferred to the columns of the Mining Journal, with he following announcement; which is now reproduced in consequence of the numerous letters and enquiries handed to them of late reply to one which appeared in the Journal on the Clementina Mine.

Mine.

The great extension of mining business, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Mesers. Warden Brothers to make their Circular now published in the Mining Journal more extensively known, and

their Circular now published in the Anning Journal more excessively and no, no estate—
That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash or for the usual fornightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charges for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in upon the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

In the year 1843, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (see cond series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c. &c. In the Compendium, published in 1843, Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. Watson Brothers have always a selected list on hand. Perhaps at no former period in the annuls of mining has there been more peculiar need of honest and experienced edvice in regard to mines and sharedcaling than there is at present; and from the lengthened experience of Messrs. Watson Brothers they are emboldened to offer, thus publicly, their best services and advice to all connected with mines and mining.

Messrs. Watson Brothers are daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

WATSON BROTHERS.

WATSON BROTHERS.

MINEOWNERS, STOCK AND SHARE DEALERS, &c., 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Vale of Conway.—This company is in 6000 shares, of 2l. each, limited. Of these 1000 fully paid-up were taken by the vendors (who are to have 2000l. more in cash), 3000 issued to the public, upon which to this time 1l. 5s. per share has been paid; and another call of 5s. will soon be made. The company, therefore, have 2000 shares in reserve, of 2l. each, and 3000 upon which they can call 15s. per share. The monthly cost is about 80l., and it is hoped the returns will soon meet it. We gave a slight account of the mine in this place in June last, and the prospects are considered good. The sett, which is held under the Baroness Willoughby DEresby, is 52 acres in extent, and near D'Eresby Mountain. It contains three east and west and three north and south lodes, but the chief operations are c nfined to the D'Eresby main east and west lode. The mine has sold 7 to 8 tons of lead, and expects to sell 8 tons more shortly.
D'ERESBY MOUNTAIN.—The question of subdividing this mine into 10,240 shares—that is, making each 512th into 20 shares—has been urged upon the directors, but they have decided not to do it until the Gors lode has been proved in the next level—No. 5. It will be seen by the agent's report in another column that the Gors of -This company is in 6000 shares, of 21. each VALE OF CONWAY .-

he seen by the agent's report in another column that the Gors or champion lode of the district continues worth 3 tons of lead per fathom, and that the great point of the mine (the No.3 level) is per fathom. This alone may make a fine mine, though of late the discovery of the Gors lode has thrown it somewhat into the shade. getting close to the rich winze, and the end is now worth

WHEAL GRENVILLE.—We understand 729 of the forfeited shares been taken up and paid for at 3% each, and the 158 remaining be offered now to those shareholders who responded in the first instance. This should put the company in funds.

instance. This should put the company in funds.

Saturday, Dec. 8—There has been a good demand to-day for D'Eresby Mountain shares at advanced prices. Tin stock continue very quiet. D'Eresby Mountain, 40 to 50: Great Laxey, 21½ to 22½; Van, 30 to 32: Roman Gravels, 7½ to 7½; Heroisfort, 8 to 3½; Leadhills, 4½ to 4½; West Chiverton, 13 to 14; Tankerrille, 4½ to 4½; Hookhope Lead, 20a. to 22s. 6d: Carn Brea, 47 to 40: Dolcoath, 31 to 36: South Condurrow, 9 to 9½; Tincroft, 14 to 15: West Frances, 4½ to 52, 43ar. 4 to 4½; Peevor, 8 to 64½; Grenville, 3 to 3½; Parys Mountain, 10s. to 12s; Eberhardt, 7 to 7½; Richmond, 9 to 9½.

Monday, Dec. 1—Market for tin shares depressed. D'Eresby Mountain, 10s. to 12s; Eberhardt, 7 to 7½; Richmond, 9 to 9½.

Carn Brea, 46 to 48; Cook's Kitchen, 2to 2½; Devon Cousols, 2½ to 3½; Dolcostin, 34 to 36; D Eresby Mountain, 40 to 50; East Van, 3½ to 4; Glemroy, 15s. to 20s.; Great Laxey, 21½ to 22½; Heroisfect, 8 to 8½; Leadhills, 4½ to 5½; North Laxey, 3s. to 10s.; Parys Mountain, 9s. to 11s.; Penstruthal, 5s. to 7s.; Roman Gravels, 7½ to 7½; Rockhope, 29s. to 22s. 6d.; South Condurrow, 9 to 9½; South Frances, 3 to 34; Tankerville, 4½ to 4½; Tincroft, 12 to 14; Van, 30 to 2½; Great Laxey, 3s. to 10s.; Tankerville, 4½ to 4½; Tincroft, 12 to 14; Van, 30 to 2½; West Chiverton, 13 to 14; West Frances, 4's to 44; West Pateley Bridge, 2 to 2½; Wheal Agar, 4 to 4%; Grenville, 3 to 3½; West Chiverton, 12 to 14; Van, 30 to 2½; Stehnland, 4% to 7½; Javali, 6s. to 8s.; New Quebrada, 2½ to 2½; Richmond, 8½ to 9.

TUESDAY, Dec. 11.—With the exception of a further rise in D'Eresby Mountain.

32: West University.

10: 24; West University.

10: 24; West Valley, 34; to 34; Chontales, 11s., to 13s.; Eberhardt.

10: 24; Very Valley, 34; to 34; Chontales, 11s., to 13s.; Eberhardt.

10: 50: 14; Frontino, 24; to 24; Javali, 6s. to 8s.; New Quebrada, 24; to 24; Richmond, 84; to 9.

Richmond, 84; to 9.

TUEBDAY, DEC 11.—With the exception of a further rise in D'Eresby Mountain shares, to 45, 55, there is very little alteration in yesterday's prices, quotations for the most part being merely nominal.

WEDNEDAY, DEC 12.—Market quiet, dealers being principally engaged with the settlement. D'Eresby Mountain, 50 to 60: West Chiverton, 136; to 144; Great Laxey, 214; to 224; Patelev Bridge, 34; to 4; East Van, 34; to 4; Rockhope Lead, 26s, or 28;, doi: Van, 30 to 35; Carn Brea, 45 to 475; Dolocath, 33 to 35; Tincroft, 12 to 13; Agar, 4 to 44; Greaville, 2 to 3; Parvs Mountain, 10s. to 12s; North Laxey, 28; to 10s; Gienroy, 15s. to 28s.; Roman Gravels, 74; to 74; to 75; to 75; to 12s; North Laxey, 28; to 10s; Gienroy, 15s. to 73; West Wye Valley, Grogwinion, and West Chiverton. D'Eresby Mountain, 50 to 60; Roman Gravels, 74; to 73; which was the valley and to 23s; 6d; Parvs Mountain, 10s, to 12s; North Laxey, 41; to 22s; Eardhills, 44; to 44; Tankerville, 42; to 43; Rockhope, 20s to 22s; 6d; Parvs Mountain, 10s, to 12s; North Laxey, 45; to 14s; Rockhope, 20s to 22s; 6d; Parvs Mountain, 10s, to 12s; North Laxey, 85; to 10s; Carn Brea, 45 to 47; Dolocath, 33 to 35; South Condurrow, 85 to 97; Tincroft, 12 to 13; Richmond, 85; to 98; Eberhardt, 65; to 77; West Chiverton shares rather firm. West Chiverton, D'Eresby Mountain, 8c; to 12s; Leadhills, 44; Co 44; West Chiverton, 134; to 144; Deccate, 44; Rockhope Valley, 30; to 42; Pervor, 6 to 84; West Chiverton, 134; to 144; Deccate, 44; Rockhope Valley, 35; West Wye Valley, 34; to 44; Great Laxey, 21; to 224; Leadhills, 44; to 44; Yest Chiverton, 134; to 144; Deccate, 44; Rockhope Valley, 20s, to 20s, 61; Rormon Gravels, 74; to 78; North Laxey, 8s, to 10s; West Chiverton,

GOLD RUN MINES.—The Gold Run Hydraulic Mining Company (Limited), worked under the supervision of J. A. Stone, will in one week have completed all their preparations for the coming season's washing. The progress made in this mine since commencing to wash two years ago is the opening of a pit, some acres in size, to a depth of 160 ft., or to within 54 ft. of the bed-rock, the working of which to this depth was successfully performed without requiring my blasting whatever. Sufficient of the fop is now removed to admit of the blasting and washing of the lower strat to the bed rock, which will be wearbed in the top in the lower strate to the bed rock, which will be wearbed in the formal of the lower strate to the bed rock, which will be wearbed in the formal of the lower strate to the bed rock, which will be wearbed in the formal of the lower strate to the bed rock, which will be wearbed in the formal of the lower strate to the bed rock, which will be wearbed in the formal of the lower strate. cient of the top is now removed to admit of the blasting and washing of the lower strata to the bed rock, which will be washed in the future in connection with the upper strata: 1000 in. of water will be used for washing both banks, and when in successful operation it is claimed by experienced miners will do as much exceution in removing the lower hard strata as 1500 in. of clear water, as the more graved there is run in water the more power it has for removing coarse rocks. The laying of an additional string of main pipe, 2300 ft. in length and 18 in. in diameter, of 14 iron is nearly completed; 207 ft. of powder drifts run on the bed rock from the main incline were charged with 325 kegs of powder and exploded on Tuesday last. The blast was a splendid success. lossening and shaking up the gravel thoroughly. In the running of the powder drifts the gravel prospected as high as \$23 to the pan.—Extract from the Mining and Scientific Press, Nov. 10.

The directors of the Agricultural Company of Magnitius boxes.

The directors of the Agricultural Company of Mauritius have declared an interim dividend of is. 6d. per share, or at the rate of 15 per cent. per annum, for the half-year ending Sept. 30.

EPPS'S COCOA—GRATEFUL AND COMFORTING.—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maindles are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame.—Cril Service Gracette. Sold only in packets labelled "James Epps and Co.," Homosopathic Chemists, London."

Mining Correspondence.

BRITISH MINES.

BRITISH MINES.

ABERDAUNANT.—8. Toy, Dec. 12: The cross-cut at the 15 is driven north 2 fms. 4 ft. We have the same hard floor of ground in the cross-cut that we had in sinking the shaft a few months ago, which we expect to get through in a few days. During the past week we have met with two small branches of barytes and spots of lead, and are both dropping towards the lode as feeders, which I think to be a good indication for a productive lode in depth.

BLUE HILLS.—8. Bennetts, A. Gripp, Dec. 8: The top lode is not yet reached in the 30 north of the engine-shaft. The main lode in the 30 east continues from 4 ft. to 5 ft. wide, of a most promising character, containing both copper and tin in good isolated patches, and worth for tin about 55. per fathom. Preparations are being made to resume the sinking of the engine-shaft on this lode below the 80 fm. level forthwith. The north lode in the 30 east end is not so productive as when last reported on. At present it is 2 ft. wide, and worth 44. per fathom. A winze below this level is worth 35. per fathom. A shaft already sunk to the adit level, and which will intersect the north lode some 10 fms. below, is being cleared out and sunk for the purpose of developing this part of the mine.

BODIDRIS.—H. Hotohkiss, Dec. 12: In the 70 driving west, on middle lode, the character of the ground and lode is improving; the lode is 10 in. wide, strongly mixed with blende and a little lead ore, a promising lode. In the 60 cross cut, driving south of Maes-y-pwil lode, we have gone through the swallow recently met with in this driving, and are now in compact limestone bearing measures, the cross-course being invisible, with a good quantity of spar showing in the end. The 15 cross cut, driving north to intersect the Crelegog lode, is still in the same favourable ground for productiveness, and fair progress is being made. No other change throughout the mine.

CAMBRIAN MINES.—Escale FFRAITH.—Thomas Glanville, Dec. 10: Copper

The 45 cross cut, driving north to Intersect the Creigog lode, is still in the same favourable ground for productiveness, and fair progress is being made. No other change throughout the hine.

CAMBRIAN MINES.—ESGAIR FERAITH.—Thomas Glanville, Dec. 10: Copper Shaft: Up to Saturday night last the water was forked to the back of the 10. I cannot say the length of this level, but when the mine is drained to the 20 (this being I understand the deepest point) I shall dila and measure each level, and send you a tracing of anne. We are clearing and securing a level above the adit that has gone off in a north-east-rly direction from the main part of the lode for the purpose of keeping the water that comes from surface through this old level from going down the shaft, as the less quantity of water we have to contend with the less time and trouble it will take us to get the shaft drained in order to drive back on the lode towards the eastern shaft. We are still engaged in drawing the opper ore from the eastern shaft, and preparing name for sole.

CARGOLL—John Januings, Dec. 12: Bowyer's Shaft: Last Saturday being our setting day we set to enlarge the 34 plat; also to sink the shaft below the 34 (in the country), by eight men, at 10? per fathom. The 34 west is communicated to the winze; the men are now squaring down the winze to the bottom of the level—the lode is large and promising, and up to this point is worth 10? per fathom A cross-cut to drive north through the lode, just behind the 34 end, for the purpose of proving what lead ore there may be in that direction. The stope in the bottom of the 24, east of shaft, is worth 10?, per fathom. The stope in the bottom of the 34, east of shaft, is worth 10?, per fathom. The stope in the bottom of the 34, and 12 fathoms before the 34 end; the lode is producing small quantities of lead, and from its appearance will no doubt improve in sinking. The adit level west on the main lode is again come in contact with the clean; the lode has a more favourable appearance, and is going in

the main lode is again come in contact win the evant, the rota has a more taxinable appearance, and is going in a lead-bearing direction, and letting out an increase of water.

CLEMENTINA.—John Roberts, Dec. 12: Monthly Report: During the past month we have cut a plat at the 34, divided and cased down the shaft from the 15 to the 34, and made everything in order for hauling from that level. We have driven south on north and south lode about 1 fathom; the lode has been pinched up very small, but has opened considerably the last foot or two driving. There are good stones of lead in the lode, and we believe that it will soon improve; we have driven about 2 fms. on the east and west lode; this lode has been producing good saving work for lead; from the strong current of water that is now esciping from the forebreast we expect shortly to have a good course of lead here at this level (the 34). We have put two men to rise on the intersection of the two lodes, so as to get a communication as scon as possible with the winze at the 25. At the 25 we have sunk a winze on the intersection of the lodes about 3 fms. We commenced sinking on a lode worth 1 ton per fathom; afterwards the lode got squeezed and poor, now it is about about 1½ ft. wide, and worth ½ ton of lead per fathom, and still improving. We are still of opinion that in both ends at the 34 we shall soon have good bunches of lead. We think, too, that by driving north we shall have bunches equally good as we had good lead in the north end of the shaft in sinking the last lift, as well also as in the winzes at the 15 as far down as they could go with the water.

COMBMARTIN.—J. Comer, Dec. 13: The lode in the 15, driving east of Harris's shaft, is improving, yielding good saving work; the end presents a kindly appearance, and the ground is favourable for driving. I think we shall have a good im-

bunches equally good as we had good lead in the north end of the shaft in sinking the last lift, as well also as in the winzes at the 15 as far down as they could go with the water.

COMBAMATIN.—J. Comer, Dec. 13: The lode in the 15, driving east of Harris's shaft, is improving, yielding good saving work; the end presents a kindly appear ance, and the ground is favourable for driving. I think we shall have a good improvement as we extend this level. The lode in the 28, driving west of cross-cut, is without change. The lode in the trial shaft is 3 ft, wide, consisting of a little silver-lead, quartz, and gossan; a very promising lode. We have commenced driving the new adit cross-cut, and find the country very favourable for speed; we hope to intersect the south lode in about 6 fms. driving.

CWM DWYFOR.—J. dewell, Dec. 11: The 20 fm level is extended 11 fms. 4 ft. west of Stewart's shaft, and 4 fms. 1 ft. west of the winze sunk from the 10. The lode in the present end is divided into two parts: the south part, which I consider the main part, is 1 ft. wide, containing sulptur, quartz, spots of copper, and some good lead ore. Altogether the lode has greatly improved in appearance in the liast 6 ft. driven; and as we found in sinking the winze that the best part of the lode dipped west, I believe we shall find lead in that direction. This south part is lettling out water freely, which is a good sign. We are driving this level by two men.—Stopes: I have four men driving and stoping in the west side of the winze, about 4 fathoms under the bottom of the 10. I am glad to say I found the lode this morning fully as well as I expected. It will yield from 12 to 15 cwts. of lead ore per fathom:

— Dec. 13: From what I could see this morning the lode in the stope on the western side of the winze is getting larger, but the dip is not quite so great. We have to drive the 20 some distance yet before we come into this run of lead. We are ously engaged getting the lead stuff broken from the stopes to surface.

DE BiGNEE.—I Philli

Ill level, and as soon as we have cleared the mouth we shall be able to put on a ronger force, and hasten on the work to completion.

DEN BIG HISH IRE CONSOLIDATED.—R. Prince, Dec. 13: In the 112 east the dications are such as to lead us to believe that the Coed y-feed w lode is near; we re nearly through at Purry's, and as the men are only 2 yards from the old sump here the ore was found some time ago, I think we may expect to send you good was shortly.

rs shortly UBBY SYKE.—W. Tallentire, Dec. 7: We have risen in the north and south a about 1 fm. 5 ft., and I think we have just reached the other limestone check lay. The vein has a throw of about 7 ft. or 8 ft. east side up, and is now about wide, composed of rider, iron, &c. The air has been very slack in the rise week, which has rather impeled our progress to thoroughly prove these so. It would be of great advantage to continue this rise to surface for ventia. I from the top of the limestone. It will not be more than 4 fms. to 5 fms. of \$\frac{1}{2}\$ e. clay, &c.

late, clay, &.—W. Williams, Dec. 11: Tempest shaft is sunk 9 fms. below the EAST VAN.—W. Williams, Dec. 11: Tempest shaft is sunk 9 fms. below the D. Speedy ground here for sinking. We are still pushing forward the 25 west, rith as yet no good results, and next month I intend having another through moss cut to prove the value of the lode. The stope at present is rather poor, and ow yielding about 12 cwts. of lead ore per fathorn

in the 82 cross-cut south is still for progress, and increasing with water, being highly mineralised with spots of mundle and ore. All other points of operations throughout the mine are without change during the peak week.

GLASGOW CARADON CO SOLS—W. Taylor, W. J. Taylor, In the 90 cast the lode is worth 183, per fathom; it is a strong looking lode, and is in favourable ground. We expect to hole this end to the winze sinking from the 78 in about a fortuight, when we shall drive this level west on this lode. The winze in bottom of the 78 is down to within about 2 fathoms of the 90; lode worth 164, per fathom. In cutting in south from the 78 cast we have met with some branches, which appears to be the lode disordered. We have now resumed driving this end cast on the north lode, worth about 54, per fathom. The 78 west, on south branch, is a worth 64, per fathom; cast on south branch the ground is still favourable, with a little ore occasionally, but not to value; we are expecting this end to strike into ore soon. In the middle level cast favourable ground, but nothing to value yet. The 52 west, on caunter lode, is worth 54, per fathom. The stopes and pitches are, on the whole, looking well, in value varying from 164, to 304, per fathom.— Ellott's Shaft: The skip-road and hauling gear is nearly completed to the 90; we hope soon to get to draw from that level. We sampled yesterday 305 tons of ore, which will be sold on the 20th inst.

GLENROY.—R. Rowe, Dec. 11: The sinking of the shaft is going on satisfactorily. The monthly measuring day is on Saturday, and in my next will give the exact depth below the 65; the lode is atill the full width, of the shaft—from 8 to 9 tt. wide, containing a little blende, as for some time. The lode in the 25 end south is 2 ft wide, and improving for blende.

GOGINAN.—Dec. 12: The western shaft to sink below the 130; lode large, containing a little ore throughout; ground favourable for sinking, and good progress will be made. The 130 to drive weat of western shaft; lode here producing

be continued east of same; lode in the present end is yielding saving soft. A winze below the 120, 70 fms., west of Bryn Pics shafe, is sunk to the regularly. A winze to shake below the 120, 70 fms., west of Bryn Pics shafe, is sunk to the regularly. A winze to shik below the 130, 45 fms. west of Bran the old of western shafe, to lot showing strong spots of owest times, and of a promised Bryn Pics shaft; lode showing strong spots of owest times, and of a promised Bryn Pics shaft; lode showing strong spots of owest times, and of a promised Bryn Pics and the shafe of the s

month: the ground in this end is everything a person could wish for the production of blende.

GREAT RETALLACK.—J. Harris, Dec. 12: We have struck into the shoot of blende in the 57 east to day, and, so far as seen, it will be quite equal to what we had at the 83—3 tons per fathom. We have cut into it about 18 in, wide, and act yet through it, but I hope to give you a more definite value of it in my next, GREEN HURH.—W. Vipond, Dec. 7: We have no ore to value this week in the end going west on the new east and west vein; the vein continues about the same size, but there are only some small brangled samples come from the top part of the drift. The stope on the branch, east of No. 1, continues to yield 1½ too for eper fathom. The stope on No. 2 cross-vein is yielding 10 cwts. of ore per fathom. The working below the adit in the north level is yielding 10 cwts. per fathom. The working new yet in the end of Fire Away, but the beds are dipping considerably. So change to notice in the water way or the cross cut south from adit level.

HARWOOD.—W. Tallentine. Dec. 7: Herd-ship: We have commenced to stope in the north end this week; the vein is about as previously described, producing for the fathom, and still looks well, composed of rick, kielly red mineral, &c. The vein in the stope is over 5 ft. wide, mixed with solid and possible.

HINGSTON DOWN CONSOLS.—T. Richards, Dec. 13: Balley's Shaft: In the

brangled ore the full width. We shall commence to dress ore again as soon as possible
HINGSTON DOWN CONSOLS.—T. Richards, Dec. 13: Bailey's Shaft: In the 172 west there is no change. In the 172 east the lode couthness to produce about 104, worth of ore per fathom, and is very promising. In the 169, west of Nikoli's winze, the lode is worth 4 tons of ore, or 12! per fathom. In the stope in the back of the 180, east of Nicholi's winze, the lode is worth 5 tons or 16k, per fathom In the cross-cut in the 140, east of Chynoweth's rise, towards the north part of the lode, the ground continues moderately easy. The tribute pitches are, on the whole, yielding fair returns.

HOLMBUSH.—H. Bennett, Dec. 14: We have set a pitch in the bottom of the 80, west of Miller's shaft, to four men; the lode is yielding good copperore. No. 1 stope in the back of the 80, west of Miller's shaft, is improved for copper. All other points of operation remain without change to notice since last reported extensive the continues to be very large, composed of lead, blende, copper, quart, &c., improving in the former; also letting out a quantity of water from the north side, with every prospect of a speedy improvement, In No. I winze, sinking is the bottom of the 30, we have not taken down any lode since commencing siking. In the 30, west'of No. 4 winze, the lode is worth 1 ton of blende and Sceta, of lead per fathom. In the 18 end east the lode is very much disordered with a flookan course; some spots of lead, and blende, copper, gustap, &c., a very promising lode. In the stopes in the back of the 30 there is no change to notice since last reported on. The stopes in the back of the 30 there is no change to notice since last reported on. The stopes in the back of the 30 there is no change to notice since last reported on. The stopes in the back of the 30 there is no change to notice since last reported on. The stopes in the back of the 30 there is no change to notice since

at reported on. The stopes in the back of the fall of in values that g pay d y, the monthly report will be sent next week.

KITHILLTUNNEL — H. Bennett, Dec 13; We are meeting with an iron. The ground continues favourable for driving through, and the

KITHLLTUNGEL—H. Bennett, Dec 13: We are meeting with small standard of iron. The ground continues favourable for driving through, and there is a quantity of water still issuing from the end LLAN (AN —Capt. Wasley, Dec. 12: Engine Shaft: We have cut the south love, and have had an influx of water, so much as to stop the workings here: the engine, however, is commencing to master it, and we hope soon to recommence working.—Old Engine Shaft: The stopes in the back of the level continue large, and produce good work: The stopes in the winze is looking very well; it is feet wide, and producing good ore; the bottom appears to be larger. These workings produced last week nearly 3 tons of finished lead. Richard's lode continue very satisfactory.

produced last week nearly 3 tons of finished lead. Richard's lode continues very satisfactory.

LOVELL (THE) — Joseph Prisk, E. Kempthorne, Dec. 13: At a monthly setting on Saturday last, the 8th inst., we set the following bargains:—The Hownan's shaft to sink below the 36, by 19 men, at 40., per fathom. The lode maintains its size, but we think the stuff sent to surface this week is not so good in quality as it has been; but out of 8 ft sinking during the last four weeks we rose from this point alone, as near as possible, 5 tons of tin, which we sold at 48. Der ton: by this you can see we have a valuable lode. No. 1 stope in back of the 30, east of Hownan's staff, by four men, at 6'. per fathom; lode worth 12. per fathom. No. 2 stope, in back of ditto, by four men, at 6'. iode worth 12. per fathom. A sope in the bottom of the 30, west of Hownan's shaff, by six men, at 6'. per fathom is lode worth 15'. per fathom. Our dressing goes on regular, and all other surface work in the usual way.

MEDLYN MOOR —J. Prisk, Charles Rowe, Dec. 13: Since our report of last week whave cut through the lode in the 33, and turned to open on it weekward; we found it to be a little disordered by the junction with the other lode, ward; we found it to be a little disordered by the junction with the other lode vard; we found it to be a little disordered by the junction with the other lode vard; we found it to be a little disordered by the junction with the other lode vard; we found it to be a little disordered by the junction with the other lode vard; we found it to be a little disordered by the junction with the other lode vard; we found it to be a little disordered by the junction with the other lode vard; we found it to be a little disordered by the following bargains on the same as last reported.

MEDLANEAR.—John Gilbert. Dec. 12. We set the following bargains on

me as last reported.

MELLANEAR.—John Gilbert, Dec. 12: We set the following bargains on

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DEC. 15. 1877.

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surphy last;—The 30 to device weat of the \$high phath by four men, at 24. To 66, and the property of the control of the contro

proported for the general meeting. The 72 fm. level, driving cast and west of Eighburrow shart, is without change; worth for the 32. per futhom. We are pashing on the sinking of the winze in the bottom of the 48 and the rise in the back of the 58, on the vein lode, as fast as possible; the lode is worth for tin and opper 65, per fathom, and hope to communicate these levels by our next setting.

day, when we shall be able to set some ground on tribute.

HYNLIMMON.—J. Garland, Dec. 18: The 36, cast of new shaft, and same level, west of Jones's winze, are in hard sandstone; the lode is small and poor, these ends are nearing each other. In the 34, east of Jones's winze, the lode is lings and open, but is also poor; these ends are also applicable to the 36, west of Berbert's winze; this end will shortly reach the perpendicular of a good pipe of ore ground passed through in the 24, when an improvement may be expected. In the 36, east of Herbert's winze, the lode although not as yet out of the influence of the heave, is gradually gesting back to its proper bearing, and is still worth 1½ ton of lead ore per fathom, a very windly lode. In the 24, east of five, the lode will produce full 1½ ton of lead ore per fathom. Drawing, and dressing are being kept on steadily. The weather continues five and open. Figure 10 feet of the perfect will produce full 1½ ton of lead ore per fathom. Drawing, and dressing are being kept on steadily. The weather continues five and open. Figure 10 feet or 10 feet

THE MINNO ASURNAL.

**PROPRIES OF MARKET—I. Note the life of the sign of the s

last month. To stope the back of the 60 cass, by six men, at 35. per fathom; the lode is 5 ft, wide, worth 25. per fathom; the lode is 10 ft, wide, worth 125. per fathom, producing tin and copper. To stope the bottom of the 50 west, by six men, at 41. 10s, per fathom; the lode is 61 ft, wide, worth 32. per fathom, producing tin and copper. To stope the bottom of the 50 west, by six men, at 41. 10s, per fathom for tin and copper. To stope the bottom of the 50 west, by six men, at 44. 10s, per fathom; the lode is 6 ft, wide, worth 30. per fathom of the 50 west, by six men, at 44. per fathom; the lode is 6 ft, wide, worth 84. per fathom; the lode is 6 ft, wide, worth 84. per fathom; the lode is 6 ft, wide, worth 84. per fathom; the lode is 6 ft, wide, worth 84. per fathom; the lode is 6 ft, wide, worth 84. per fathom; the lode is 1 ft, 6 in. wide, worth 84. per fathom, producing tin.—Pink Lode: To drive the 50 west, by four men, at 44. per fathom; the lode is 1 ft. 6 in. wide, worth 84. per fathom; the lode is 1 ft. 6 in. wide, worth 84. per fathom; the lode is 1 ft. 6 in. wide, worth 84. per fathom; the lode is 1 ft. wide, producing low-prior tinstuff. The deep adit level to drive east, by one man and one boy, at 26. los per fathom; the lode is 1 ft. wide, producing low-prior tinstuff. The deep adit level to drive east, by one man and one boy, at 26. per fathom; the lode is 1 ft. wide, producing low-prior tinstuff. The deep adit level to drive east, by two men, at 10s. ln 16., at a standard of 386. per ton for the tin; the lode is 2 ft. 6 in. wide, worth 44. per fathom for tins. WEST ROSE EAR.—H. Stephens, W. Bennetts, Deo. 13: There is no particular change to notice in any of our points of operation. The copper sampling will be next week, and we are raising a good quantity of blende, a parcel of which we shall sample at the same time if possible.

WEST TANKERVILLE.—A. Waters, Deo. 14: The 86, south of boundary shaft, is over the 1 ton per fathom. No. 1 stope, in back of said level, is worth 1, on per fathom. No.

ncrease of water, without a set of pumps. I caloulate that the outlay B even by the pumps in working order will be about 50%, and this will be saved in three months fur labour alone. Our sale to-day of 35 tons of lead ore realised 433%. '8 64.

WEST WHEAL TOLGUS.—Dec. 13: Taylor's shaft, sinking under the 145, is in killas. The lode in the 145 west is 35, ft. wide, yielding 3¼ tons of ore per fathom. The lode in the 125 west is 15, wide, yielding 1 tons of ore per fathom. The lode in the 125 west is 1ft. wide, yielding 1 tons of ore per fathom. Driving west from rise in the 115 west the lode is small and poor. I can be seen to the 135 west, and of the 185 west, east of No. 5 winzs, the lode is small and poor. I can stope in the back of the 155 west, east of No. 5 winzs, the lode yielding 10 tons of ore, worth 40f. per fathom. The winze under the 115 west have been suspended to stope six the back of the 155 west, east of No. 5 winzs. In the 135 west, east of No. 5 winzs, the lode yields 7 tons of one, worth 40f. per fathom. The winze under the 115 west have been suspended the stope sax and west of No. 5 winzs. In the 135 west the lode is cut off by a hard bar of ground; we have also suspended the stope sax and west of No. 5 winzs. In the 135 west the lode is cut off by a hard bar of ground; we have to search for it.—Bichards' shaft; The summer are engaged fating pitwork, &c. In the 95 west the lode is small and poor. We have suspended the 5c east.

WHEAL CREBOR.—John Andrews, Dee, 11: The stuff will be eleared out from the 150 and to-day, and to morrow morning the driving will be resumed. The lode in No. 2 or east back of the 120 is 5 ft. wide, worth 100, per fathom. The lode in No. 2 or east back of the 120 is 5 ft. wide, worth 100, per fathom. The lode in No. 2 or east back of the 120 is 5 ft. wide, worth 100, per fathom. The lode in No. 2 or east the lode is 15 inches with the productive ground, and I think we shall see a change here for the better in the course of a few days. There is no change in the 169, 7

THE WEEK.

SATURDAY, DEC. 3.—The London and River Plate Bank appears to have considerably improved its position, and a dividend of 4 per cent. has now been declarad. The 100% shares, with 40% paid, have been within recent times as high as 58%, and as low as 28%. Grant Trunk stocks are likely to make up on Monday something below what they did last account. They have been gradually drooping—the Thirds could be had to-day below 18%. British had a rise of ½, to 88%, Brigaton, A, one of 3*, to 119½. Credit, A, was dealt in at 1½, and the B shares were sold fars. In mining shares Devon Consols was a firm market, at 3%. Contuites were wanted at 12*, 6d.; for October a profit of 22%, is stated to have been made. It was reported that in D'Eresby Monntain shares a transaction took place at 44%, and Doicoath at 35. Copper shares rather more in demand. Cape Copper dealt in at 34; Chicago, 2 to 2½; Yorke Peninsula, ½ to 3½; Russia Copper, 1¼ to 2; Last. Chance, ¾ to 1; New Zealand Kapanga, 13-16 to 5-16; Colorado, 1¾ to 2. Flagstaff rose 5**, to 1½. Egyptian stocks were firm. The Unified rose ½, to 33, and the Preference, ¾, to 55. Russian, 1873, closed 77½ to 77½; and Turkish, 1871, 33 to 34.

TUESDAY.—Owing to the news of the surrender of Plevna, the first transaction in Russian, 1873, this morning was at 78½, being a rise of 1½, and this was the closing price. A week ago attention was drawn to the undue depression of Egyptian Preference, then 52½. To day the market was firm at 5**, and the Unified was steady at 334. The dividend of the Cape Copper Company is to be 17s. 6d. per share; as it shows a reduction of 2**, 6d, the shares fell 1½, to 33. Since the last dividend, however, the fall has amounted to 5½, or 6½, per share, more than sufficient one would think for the lesser division of profits. Favourable results are anticipated from the company proceeding to treat its own ores. Plagstaff was quoted in the morning 1½ to 2, being a further rise, but afterwards relapsed to 1½, 1½. Port Phillip, 12**, 6d. to 16**, Exchequ

ever is only par price. The shares continue to be pressed for sale; holders express themselves confidently of a rise in the metal early in spring, but yet are desirous of getting out before Christmas. Carn Brea gave way 21. D'Eresby shares were quoted to day 50 to 60, with business done at 55. Egyptian Preference improved to 54%. Brighton Aquarium fell 08s, to 1048, and Royal Aquarium fill 08s, to 1048, and Royal Aquarium fill 18s, to 1048, and Royal Aquarium fill nos, to 1048, and Royal Aquarium fill shows a feriod of the price of Prefence was 64%, but long before four it had fallen below 53, the Unified then being only 315%. In railways, Caledonian and Sheffield showed considerable weakness, and closed at a further fail from yesterday. It is stated by the Richmond directors that the phops in future to pay dividends quarterly, and also extinguish the Debenaure Debt, which at present amounts to 13,000. Flagstaff dropped to 15%, 13% on he issue of the expected circular criticising certain recent arrangements.

FRIDAY (Opening).—Last night's mysterious tall in Egyptian stocks has brought in buyers, especially of the preference, which is \$6 per cent, higher-63½ to 53%, the Unified being 36 better. Ballways as yet shown he fresh feature. Royal Aquarium shares are offered, and not better than 2% to 3%. Flagstaff are 1½ to 1½, the Unified being 36 better. Ballways as yet shown he fresh feature. Royal Aquarium shares are offered, and not better than 2% to 34%. Flagstaff are 1½ to 1½ to 1½ to 14%. Roman Gravels, buyers, at 7%. Devon Consols are quoted 3 to 3%, or a further rise of ½, The Aberdaumant Company, from the tenor of yesterday's circular, appears to be in actrownis; shares are called 1s. 6d, to 2s, 6d, Carn Brea, 43 to 48; Dolcosthi, 34 to 35; Wert. Frances, 3% to 4; Wheal Kitty, 2% to 38, — Thos of Cock.—Since last writing Egyptian (preference) has been down to 53%, and the Unified to 31, but both have now recovered to last hight's level, No one appears able to give a good explanation of these sudden ups and

to 1½; Penstruthal, 5s, to 7s.; North Laxey, 8s, to 10s.; Parvs Mountain, 9s, to 11s.; Glenoy, ½ to 1; Llanswst, 1½ to 2½; Pateley Bridge, 2 to 3½. At Alltami rates, for these sort of spasmodic movements sel iom last long unless some un colliery the output is increasing, and sales are made at a good profit. Sharces requoted 4 to 4½; Chapel House, 3 to 3½; Newport Abrearne, 4 to 4½.

Birchin-lane, Dec. 14.

FERDINAND R. KIEk.

TO THE METAL TRADE

FOR COPPER, TIN, LEAD, &c., apply to-MESSRS, PELLY, BOYLE, AND CO., SWORN METAL BROKERS, ALLHALLOWS CHAMBERS, LOMBARD STREET, LONDON. (ESTABLISHED 1849.)

The Mining Market: Brices of Metals, Ores, &c

IRON.	£	8.	d. £	8	d	TIN. 2 . d. 2
Pig. GMB. f.o.b., Clyde.	. 2	12	2-	_		English, ingot, f.o.b 71 10 0- 72 0
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Rails. Welsh, at works.	. 5	0	0- 5	2	6	Tough cake and ingot. 71 0 0
Sheets, Staff., in London	8	15	0- 9	0	0	Best selected 72 0 0
Plates, ship., in London	7	- 0	0- 7	- 5	0	Sheets and sheathing . 74 10 0
Hoops, Staff	. 7	15	0-8	0	0	Flat Bottoms 77 10 0
Nail rods, Staff. in Lon	. 7	0	0- 7	5	0	Wallaroo 75 0 0- 75 10
STEEL.						Burra, or P.C.C 73 0 0- 73 10
English, spring	14	0	0-19	0	0	Other brands 70 10 0- 71 0
cast	35	0	0-45	0	0	
wedish, keg	16	0	0-	_		PHOSPHOR BRONZE.
fag. ham	17	0	0-	_		Bearing metal £112 0
LEAD.		-	-			Other alloys £120 0 0- 140 0
English, pig, common .	19	0	0-19	5	0	
. L.B	.19	- 5	0-19	10	0	Brass.
W.B	20	0	0-	_		Wire 8%d
sheet and bar.	20	10	0-	-		Tubes1014
pipe	21	10	0-	-		Sheets 9%
red	99	8	0.99	10	0	Yel, met, sheath, & sheets, 614 - 7d.

* At the works, is. to is. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IC quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

Nails composition.

TIN-PLATES.*

REMARKS.—In last week's report we commented upon the healther condition of our markets generally, their comparative safety against possible panic, and the probability of a gradual restoration and development of trade provided the reduced prices were allowed to continue; but in referring to the advantages thus already obtained, we also stated that any disturbance to the existing containing would next assuredly injure the markets by iconardiance that restoration and development of trade, provided the reduced prices were allowed to continue; but in referring to the advantages thus already obtained, we also stated that any disturbance to the existing equanimity would most assuredly injure the markets, by jeopardising their position and postponing the general resuctation. It is, therefore, to be regretted that a speculative feeling of some dimensions has just been displayed in copper, which seems calculated to affect the legitimate demand without giving any permanent relief or stability to the market; and for this reason, that speculation unsupported is worse than useles, for although its duration may be fleeting yet it is frequently productive of misolievous consequences, and more particularly at a time like the present, when it completely undermines confidence, and weakens instead of strengtheus quotations. For speculation to be successful it should be accompanied with an increasing legitimate business; but as yet there is not the slightest sign of a general improvement, in fact trade is reported to belgiuller than ever, and not until the political turnoil which agitates the Continent of Europe is over will there be any security, or any considerable increased demand. What is taking place now, therefore, is chiefly speculative, and in anticipation of what may be hereafter; but this is very risky, for all commerce and industry must be curried on with extreme care and caution for some time to come, and not under excitement, or prematurely forced, other wise the result will doubtless prove very unsatisfactory, and great in re-establishing trade on a sound basis. Bed than has been considered to the substitution of the properties of the community at large are anything but flourishing, and capitalists are not prepared to venture on any investments in metals until the future course of politics is more clearly defined. The crisis is not considered to be past, and we must wait for further events of a more definite and decisive character than has taken place. So the su

as does not suppose who introduced man of the secretary with one productions for 1575, 33,520 tons for 1575, and 033,420 tons for

	Ores.	Regulus.	Unwrought or part wrought.
1875Tons	49,497	31,620	26,296
1876	89,096		35,941
	104,621		37,255
By the above figures it	will be so	en that an enormous	ncrease has taken place in
ores, and that the suppl	y or othe	er kinds have also in	creased, whereas it will be rease in exports. This is
nextly accounted for hy	Australia	supplying India and	the American Continents.
The exports of wrought			
1877	and day	1875	1876
M 10 500		35.000	2010

year, and the figures would seem to include that there was too much shipped in 1876. Nevertheless, we are sorry to see our exports of 1877 under those of the two previous years.]

By the mail from New York Dec. I the market there was reported quiet, but manufactured and yellow metal continued quoted about previous rates. New sheathing copper [28c., and boils and braziers, 30c.; yellow metal sheathing, 20c.; boils, 25c.; yellow metal healthing, 20c.; boils, 25c.; yellow metal nearly and the property of the

where will be the outlet for other makes of tough and Chill? The figures are so big that we think the rumour should be received with caution; but if the correct all we can say is that it appears a venturesome business, and we wish the holders well out of it.

IRON.—The demand for this metal is extremely limited, and orders are given out so slowly, and for such limited quantities, that the works are prepared to make a slight concession in price for anythink like a fair quantity and good specification. Merchant bars of common quality are obtainable at 54. 15s. in London, but this price is no temptation to shippers, for the foreign markets are over supplied with Belgian bars, and as they are still to be bought cheaper than English the orders are lost to the English houses. It would be exceedingly gratifying to be able to observe some indications of a return of the former demand, for many believe, and not without sound reason, that a good iron trade would be the foundation for a general improvement in the demand for other metals; but, however near we may be to a revival, it certainly is not visible yet awhile. The Belgians take away our trade, and although it is said that many of the works are upheld by financial houses, and that one after another are collapsing, that the entire make is comparatively small, and that when a really good demand sets in they will soon be filled up, yet it is by no means satisfactory to know that whou we most want orders, such as at the present depressed times, we have the least chance of getting them, and it is disagreeable also to know that the Belgians get the first choice of the orders even in good times. The Belgians have considerably increased their production of late years, and although current prices may not bay the present propietors, and many of them may be compelled to close or soil off, the work will still still exist, and only pass into other hands under more favourable auspices, and starting without liabilities or outlay a profit may accrue where a positive loss was previo

Week ending Dec. 9, 1876 Week ending Dec. 8, 1877 Decrease
Total decrease for 1877
Imports of Middlesborough pig-iron into Grangemouth:—
Week ending Dec. 9, 1875.
West ending Dec. 9, 1876.

TIN-PLATES.—The demand for America is fairly good, and manufacturers are firm at previous rates, and some are trying for slightly higher prices; but for the Continent and other parts there is very little doing. Prices are extremely moderate, but any attempt at an advance should be made very cautiously, otherwise orders will be returned unexecuted, and, perhaps, not repeated.

returned unexecuted, and, perhaps, not repeated.

Stell.—This metal is improving, and the Indian demand for railway material is large. Russia is also buying for military lines and rolling-stock, but in war materiel the trade is slack. The home lines are also buying pretty freely, and prospects are decidedly brightening. The New York market also reports a considerable enquiry for steel rails; the future of this metal is very promising, and likely to supersede to a very great extent both iron and copper, it can now be produced in such a superior manner, and with such a degree of softness and finish as to prevent the slightest friction.

and fixely to supersease to a very great extent out from and copper, it can now be produced in such a superior manner, and with such a degree of softness and finish, as to prevent the slightest friction.

LEAD.—During the first eleven Lonths of this year the importations of pig and sheet have amounted to 85,936 tons, against 75,617 tons in 1876, and 72,568 tons in 1875; and the exports are 39,526 tons for 1877, 33,459 tons for 1876, and 33,401 tons for 1875. The demand is quiet, and prices are again quoted slightly lower.

SPELTER.—The imports of this metal, both of cake and rolled, are greatly increasing. From January to the end of November there were 39,791 tons of cake, against 26,548 tons in 1876, and 20,015 tons in 1875, and manufactured 286,633 cwts., against 263,027 cwts. in 1876, and 267,676 cwts. in 1875; and the exports of spelter and zinc combined amount to 109,562 cwts. in 1871, 105,849 cwts. in 1876, and 93,580 cwts. in 1875. The prices keep tolerably steady at about 194.15s. for ordinary Silican brands.

Tin.—In the beginning of the week prices dwindled down to 664. for both Straits and Australian, but the market has somewhat recovered since, and sales for orward delivery are reported at much higher rates. The future course of the market will be fairly tested during the next three or four months, and if the supplies in that time are not in excess of the demand, dealers will understand better how to shape their course; hitherto the production has been enveloped in mystery, and but few would venture to buy beyond actual requirements. The tremendous down to shape their course; bitherto the production has been enveloped in mystery, and but few would venture to buy beyond actual requirements. The tremendous down

whilst 1316 flasks were shipped away. On the other hand, a further quantity has been returned to San Francisco from Hong Kong quantity has been returned to San Francisco from Hong Kong, cing shipments from San Francisco to Hong Kong. Truly an accountable procedure.

accountable procedure.

THE IRON TRADE.—(Grifith's's Weekly Report).—Friday Evening. A limited business has been transacted during the week in Societh Procedure.

A limited business has been transacted during the week in Societh Procedure. The quotations on the Glasgow and London Exchanges have remained without change during the week, and our telegrain this evening from the former centre quotes G. M. B. warrants 52-2.91. buyers a shade less. This is id. below the price last Friday. The teading maker have made little change since last week, as will be seen from our quotations—No.1: Gartsherrie, 60a.; Coltness, 65a.; G. Busine oil of Gartsherrie, 60a.; Coltness, 65a.; C. Griffer, 60s.; Langloan, 62a. Sumn e leg. 50a.; Monkland, 53a. 6d., f.o.b. Glasgow; Glengarnock, 50a.; Eglington, 54. f.o.b. Ardrossan; Shotts, 61s., f.o.b. Leith; Kenniel, 54s. f.o. Breas. The organised effort of the Scotch ironmasters to retrict the production until the actigencies of the trade call for increased output, followed by the action of the Cieveland ironmastres, who have resolved to blow out till better times, and have in the sum of the situation, and show more disposition to enter into forward must have its reflect. Already in almost all centres consumers of pig iron are avoiding to a sense of their supplies of pigs. At Barrow, on Monday, the market for hematites was large business until the approaching quarterly meetings. At Middlesborough, on their supplies of pigs. At Barrow, on Monday, the market for hematites was large businesse until the approaching quarterly meetings. At Middlesborough, on their supplies of pigs. At Barrow, on Monday, the market for norment being in the hands of middle men, who are selling their stocks below the official basis of the formatic and stock of the situation, and show more disposition to enter into forwards or booking in the hands of middle men, who are selling their stocks below the official basis of the formatic services of the stock of the situation of the formatic services of the stock of the s

Mesers. PixLey and Abell. — Gold: We are without any arrivals to report this week, but the demand for the Continent has been so limited that the small order to hand can wait the delivery of the gold, per Kasbgar, from India and Ohina to morrow: 100,000/. American gold coin has been withdrawn from the Bank to shipment to New York, and 20,000/. so wereigns, for the Brazils. The Casplant take 10,000/. to Halifax, the Tagus 25,000/. to the Brazils, and the Khedive5.00/. to Alexandria and 7000/. to Singapore. — Silvers. — Business continued to be done six varying from 54/d. to 54d. per oz. from the date of our last circular (6th Inst.) unil yesterday, when, upon the result of the tenders for the Council draft becoming known, the market became quite disorganised, and it was very directle to gle any quotation. To-day rates are somewhat steadier, and we give 53/d, per oz. nearest. The arrivals during the week comprise—55,000/. from the Paolic, which was sold at 54/d, 44/916. from New York, and about 315,000/. from Germany, but the Government is not selling at the prevailing low rates. The Khedive has taken 105,000/. to India.

The MINING SHARE MARKET has been moderately active this week, and a fair business transacted in a few lead mines. Tin and

week, and a fair business transacted in a few lead mines. Tin and copper shares dull.

The mines chiefly dealt in have been D'Eresby Mountain, Roman Gravels, West Chiverton, North Laxey, Rockhope, Glenroy, Pary, Mountain, West Wye Valley, Grogwinion, Van, Great Laxey, Leathills, Pateley Bridge, West Pateley, and a few others.

TIN MINES show very little, if any, change since our last and scarcely any business is doing in them. Dolcoaths are quoted 33 to 35; Carn Brea, 43 to 45. West Basset, 14 to 2; at the meeting, in Cornwall, the accounts showed a loss of 159% on the quarter's working, and a balance was shown against the mine of 25.127%. A call of [6s. 8d. per 6000th share was made. The tin sold, 156 tons, realised 6040%; copper, 195%. The costs were charged up to Dec. 1. The report stated that an improvement had taken place in the 124 and 130 fm. levels east.

The report stated that an improvement had taken place in the 124 and 130 fm. levels east.

East Pool, 9½ to 10; Penstruthal, 5s to 7s. 61.; South Condurow.

9 to 9½; South Frances, 3 to 3½; Tincroft, 13 to 15; Wheal Agar, 4 to 4½; Wheal Basset, 9 to 11; Wheal Grenville, 2½ to 3; Wheal Jane, 1½ to 1½; Wheal Kitty (St. Agnes), 2½ to 2½; Athe meeting on Thursday the accounts showed a loss of 8624, and a debit balance of 27014. A call of 7s. 6d. per share was made. The tin sold realised 28784. The costs for four months were 37564. The report states that by suspending operations on Dawkins' lode the costs will be reduced 2004. per month. New Cook's Kitchen accounts showed a loss of 4744, and a debit balance of 9314. A call of 4s, per share was made. West Frances, 3½ to 4½; at the meeting here a loss was shown on four months' working of 564. The tin sold realised 41994. The costs were 42474. The tin raised was more than in any former period of four months, and the agents hope to keep up the former period of four months, and the agents hope to keep up the quantity for the next meeting.

COPPER MINES still remain very quiet, with scarcely any business.

ness doing in them. Copper, however, has gone up a pound or two, and should it further advance a little more spirit may be thrown into copper mines. Devon Great Consols, 3 to 3½. Parys Mountain, 10s. to 11s.; the branch lately opened in the 90 cross-cut south is yielding saving work both for sulphur and copper. Hingston Dwn, 5s. to 7s. 6d.; West Tolgus, 69 to 71; Marke Valley, ½ to 1; Wheal Crebor, 1 to 2; Prince of Wales, 3s. 6d. to 5s. 6d.; East Caradon, 15s. to 7s.

15s, to 20s.

Lead Mines have been more dealt in than any other mines, and some have advanced in price. Great Laxey are quoted 21½ to 22; West Chiverton, 13½ to 14½; Great Dyliffe, 2 to 3. D Eresby Mountain have further advanced to 50, 60; the new discovery in No. 4 level continues worth 3 tons of lead per fathom, and the lode in No. 3 level as it approaches the rich winze, the point for which the company was started is compined to one and worth 14 ton of lead

level continues worth 3 tons of lead per fathom, and the lode in No. 3 level as it approaches the rich winze, the point for which the company was started, is coming into ore, and worth 1½ ton of lead per fathom.

Roman Gravels. 7½ to 7½; the 105 south is worth 1½ ton per fm; the 105 north, 1 ton. The usual sampling next week. Glenroy, 15s. to 20s.; the lode here continues the whole width of the shaft, and contains a little blende. North Laxey, ½ to ½; the 146 south has improved; is now 2 ft. wide, and producing saving work for the washing-floors. Van 30 to 32; the sale of lead this month (500 tons) realised 6288/L 15s.; blende, 817. 10s.; total, 7106/L 5s. East Van, 3½ to 4. Plinlimmon, 4s. to 6s.; the lode in the bottom level (the 36 east) is worth 1½ ton of lead per fathom. West Tankerville, 12s, 6d. to 15s.; the sale of lead here realised 433/L 2s. 6d. Pateley Bridge, 3½ to 4; the particulars of the meeting will be found in another column. The accounts show a debit balance of 3791/L 18s. 5d. The costs at the mine from August, 1876, to October, 1877, was 4773/L 13s. 1d.; lead sold during same perio 11605/L 10s. 41; London expenses, 549/L 3s. 4d. The capital account seems to stand thus. Out of the 4000 shares of 5/L each only 3000 were issued, which gave 15,000/L; out of this 11,000/L was paid to vendors; evidently the mine, one of the best speculations in the market, has been crippled for want of working capital. To improve this state of things the directors were authorised in April last to issue 5000/L debenture, but only 2610/L worth were taken up. The produce of last month was 30 tons of lead, worth 570/L, got at a cost of 360/L, so that it would seem all that is required to bring the mine into a profitable state is more capital.

perhaps have to take a reduced price. The mistake of outstanding the markets is so often made that it is surprising holders are not more on the alert. This is not to the period to anticipate a long rise, sellers must be satisfied with a small return. On their chance of making any at all may be lost.

QUICKSH.VER is unchanged, at 71. 5s. There has been only a small business deing at this, but importers appear firm, and decline all counter offers. An exceptional importation from the East kas arrived, but has not been offered on this market. California reduced, but has not been offered on this market. California reduced by the stamps which is a steady at 44½ to 45 cents, with moderate supplies, only falls as the sample of the month of October of 2294, although the stamps was idle eight days, and 95l. are charged in the costs for repairs to machinery. The gold returned is estimated at 780l., and the reports are very satisfactory. Exchequer, 4s. to 6s.; Flagstaff, 1½ to 1½; Javali, 6s. to 8s.; New Zesland Kapanga, 1 3-16ths to 1 5-16ths; Lust Chance, 731 flasks having been received during the week ending Nov. 22, 3 to 1; New Quebrada, 2½ to 2½; Pestarena, ¼ to 3; Port Phillip,

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† iy \$\frac{1}{4}\$ Richmond, \$\frac{1}{4}\$ to \$\text{9}\$; the directors here have declared a dividend of 7s. 6d per share. Cape Copper, 33 to 35; the dividend here is 7s. 6d. per share. Frontino and Bolivia, \$2\frac{3}{6}\$ to \$2\frac{1}{6}\$.

The Market for Mine Shares on the Stock Rechange has shown or the pittels animation during the week, and the teninny of the stigues with an one of the stock of the hard since the childy of the hard since the control of the stock of the hard since the control of the control of

not yet figured in the Journal in connection with the Flagstiff Company, since these new proprietors hold under judgment of the Utah Courts for debts. It is not surprising, considering the anxiety of certain holders to dispose of their shares at present prices, that every effort should be made to keep the public in ignorance of the true state of affairs, but the avoidance of publicity alone should be a sufficient warning both to capitalists and speculators.

Last Chance, \(\frac{3}{4}\) to 1; the secretary requests us to state that highly satisfactory advices have been received from Utah respecting this company. The Emma Mine is reported to have been legally transferred to the American Mining Company. The property was bought in by Mr. Trenow W. Park on a judgment several months since, and has been re-organised under the above title, with the principal place of business in New York, General Schenck and Mr. Park retrining their interests. The mine is being developed, and continues to make regular shipments of high grade ore, which is sampled at the Pioneer Mills, and sold to the Sudy smelters. The mining interests in the Cottonwoods are described as "looming up" brighter than ever, and promises to take the lead. Mr. John M Donald, the Recorder of Little Cottonwood, is reported to have made a new and rich discovery just below the Flagstaff dump, which promises to be a second Emma. What the extent of the vein is, and the assay value of the ore, are not yet known.

Blue Tent, \(3 \to 3\frac{1}{2}\); a report from superintendent announces a further blast of 10 tons of powder had been set off with very excellent results, giving a large body of broken gravel to deal with when water was sufficient. Hultafall, \(\frac{1}{2}\); to 5; at the dressing-floors the outlay on capital account will be nearly completed by the end of the year, and at the mine; sinking and driving has been prosecuted energetically. The energia in the bottom of the mine continue as rich as ever.

outlay on capital account will be nearly completed by the end of the year, and at the mines sinking and driving has been prosecuted energ-tically. The ends in the bottom of the mine continue as rich as ever.

Lead Mines shares continue to find purchasers. The metal is firmer in price, and the latest advices from the United States refer to a marked improvement in the lead market there, with advancing prices; the operators are feeling more sanguine, and are making preparations for an increase business. Writing from New York, a correspondent states that the prospect gives the impression that higher rates will rule for pig lead; holders are now showing firmnest, and as a consequence the market is rapidly advancing, and it would not be surprising if there should soon be much higher prices. Van, 30 to 32; the usual monthly report states that there is no change to notice in the mine. The sale on Thursday, 500 tons of lead ore and 300 tons of blende, realised 7100%. 53.

Grogwinion, 33 to 44; everything is progressing well at the mine. Wye Valley, 2½ to 34; the appearance of the bottom level is satisfactory, and it is expected that some important discoveries will shortly be made. The manager is of opinion that the rich run of ground which was productive in the 10 east will before long be intersected in the 46 east. West Wye Valley, 33 to 4½; the appearance of the mine continues satisfactory, and lead is being quickly got ready for sale. Caron, 2½ to 3; the new shaft from surface to the bottom has neen completed, and the sinking will as soon as possible be again resumed for a deeper level. This shaft has been rapidly pushed down, it being only two months since the sinking was commenced. The lade continues to look promising, and further discoveries are expected to be made by driving the bottom level east and west. The surface works are making good progress. Red Rock, 2 to 2½; the discovery in the 60 east, which was announced by telegram at the meeting last week, has since been confirmed, and is its provide to have taken

in the 20 east from No. 2 shaft, and that the other points are looking well.

Subjoined are the closing quotations:—

Assheton, ¾ to 1; Cambrian, 2½ to 3; Caru Brea, 45 to 47; Court Grange, 1 to 1½; Devon Great Consols, 36 o 3½; Dolooth, 34 to 36; East Caradon, ¾ to 1; East Caradon, ¾ to 1½; East Van, 3½ to 4; Gleuroy, ¾ to 1; Great Laxey, 2½ to 22; Hingeton Down, ¾ to ½; Leathills, 4½ to 4½; Parts Mountaid 9t. to 11s.; Pateley Bridge, 3½ to 4½; Penstruthal, 4s. to 5s.; Roman Gravels, 7½ to 8; Rockhope, 1 to 1½; Tankerville, 4½ to 4½; Tincroft, 12½ to 13½; Van, 29½ to 30½; West Assheton, ¾ to ½; West Basset, 1 to 1½; West Chiverton, 13 to 15; West Pateley, 2 to 2½; West Tankerville, ¾ to ½; Wheal Grebor, 1 to 2; Wheal Grenville, 3 to 3½; Almada and Trito, ¾ to ½; Argentine, 2½ to 3; Blue Tent, 3 to 3½; Cape Copper, 33½ to 34½; Codard Creek, ¼ to ½; Chontales, ¾ to ½; Colorado United, 1½ to 2½; Conde of Chill, 2½ to 3; Eberhardt and Aurora, 6½ to 7½; Exchequer, 4s. to 5s.; Flagstaff, 1 to 1½; Frontino and Bolivia, 2½ to 2½; Hultafall, 4½ to 5; I.X.L., 4s. to 6s.; Javali, 6s. to 8s.; Kapanga, 1½ to 1½; Iast Chance, ½ to ¾; Shern Buttes, 1½ to 1½; Exchequer, 4s. to 5; I.X.L., 4s. to 6s.; Javali, 6s. to 8s.; Kapanga, 1½ to 1½; South Aurora, ½ to 3; Port Phillip, ½ to 3; Richmond Consolidated, 8½ to 9; St. John del Rey, 315 to 325; San Pedro, ½ to ½; Sierra Buttes, 1½ to 1½; South Aurora, ½ to ½; Tecoma, ½ to ½; United Mexican, 1½ to 2; Oregon pref., 4 to 4½.

315 to 325; San Pedro, ½ to ¾; Slerra Buttes, 1,5 to 1¾; South Aurora, ½ to ¾; Tecoms, ½ to ¾; United Mexican, 1½ to 2; Oregon pref., 4 to 4½.

COLLIERIES.—There is no change to note in the market for these shares beyond a slightly increased enquiry for some of the best of them, which, though it has not yet raised prices, has rendered them firmer. The very prolonged depression which has affected the coal markets has given little encouragement to investors in colliery shares, but there can be no doubt that those who have bought at the low prices which have prevailed for so long a time will reap the full benefit of their wisdom at no distant date. The recovery from such a state of things as we have witnessed in the coal and fron trades must of necessity be gradual, especially when many adverse influences are still at work to check improvement. The long Turko Russian war, with the unnecessarily strict interpretation by the English Government of the neutrality laws, has been a great misfortune to coalowners, for some of the best foreign coal and iron markets have been closed to us, while our continental competitors have been reaping our profits. The home trade shows little or no change, except that in some districts house coals are slightly firmer, and will, no doubt, show a rapid upward tendency should we get any marked depression of temperature, such as may reasonably be expected at this season. It is reported that some large coal and iron works are about to be restarted in South Wales by a limited company; and as the coal is of a very superior class, and the iron produced at the works has always been noted for its excellent quality and readily saleable character, no dou't the company will attain snocess. Of course the present is a most favourable time for the purchase of such a property, for as the coal and iron trades improve collieries and iron works will increase very much in value. The reports from Alltami and Llay Hall are satisfactory, the former shares closing at 4 to 5, and the later 8 to 10. Chapel Hous

At the Swansea Ticketing, on Tuesday, 2256 tons of copper ore

At the Swansea Ticketing, on Tuesday, 2256 tons of copper ore were sold, realising 9584.7s. 6d. The particulars of the sale were—Average standard for 9 per cent. produce, 84l. 13s. 2d.; average produce, 75-16; average price per ton, 4l. 5s.; quantity of fine copper, 164 tons 5½ cwts. The following are the particulars of the two last sales:—Date. Tons. Standard. Produce. Perton. Per unit. Ore copper. Nov. 2) 2069 831 3 2.... 75-16. 4 5 0.... 11 s. 24l. 255 1a 2 11 236 31 2.... 75-16. 4 5 0.... 11 s. 58 6 10 Compared with the last sale, the advance has been in the standard 2l. 9s., and in the price per ton of ore about 3s. 6d. The Betts Cove ore gave a produce of 83, and sold at 11s. 834. per unit; Union, produce 5 13-16, per unit 11s. 7\frac{1}{2}d.; Aljustrel, produce 4\frac{3}{3}, per unit 10s. 11d. There will be no sale on Christmas day.

GREAT HOLWAY.—We can refer our readers with pleasure to the report of the first meeting of this company, held on Friday week. The statements made by the Chairman (Sir S. Walcott, K.C.M.G.), and Mr. W. W. Mackerson, Q.C., were highly satisfactory, and the management seems to be in the hands of those who will pay the strictest attention to the working of the undertaking. Ample capital is forthcoming for the purposes of the mine, and there can hardly remain a doubt but that the undertaking will prove a great

success, giving employment to a large number of men in the prosecution of underground operations. The returns of lead will, it is expected, be larger, yielding sufficient to return satisfactory dividents. The directors and their friends have invested largely in the shares.

shares.

Tolgus Consols.—A full report of the meeting of shareholders, held on Wednesday, appears in another column. If the shareholders respond to the issue of shares a great success seems in store for them in the employment of the extra capital. The discovery made at the 25 is likely to turn out well, and so soon as the 40 cross-cut strikes the lode a great demand for shares may be expected.

D'Eresby Mountain.—The Gorse lode in No. 4 adit continues rich. It is described by the agents as a magnificent lode. The lode in No. 3 adit is improving every foot driven, and as the level approaches the winze of the old workers it is apparently entering a rich course of ore. The prospects of the mine have caused a great demand for the shares, and we hear that one or two of the directors of the Van Mine have become shareholders.

Pateley Bridge.—The facts elicited at the general meeting are considered to lead to the opinion that the developments recently made are of a marked and satisfactory character, indicating that a career of prosperity has been entered upon limited only by the scale upon which the operations may be extended.

St. Patrick.—Lead ore, it is stated, has been discovered in small quantities in sinking below the 120, which may lead to a good discovery.

** With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: Copper Smelters—Copper Mines: Tasmania Tin Fields—No. I. (J. Mufford); the Flagstaff Mining Compuny: Placer Mining in California (O. Harvey: New Quebrada Company: Tollma Mining Company: Hunter Consolidated Mining Company: the Thirsis Silver Process: Trial of Rock Delliling Machinery (Le Gros, Mayne, Leiver, and Co.); Rock-Boring Machinery (T. B. Jordan); Hand Power Rock-Drill; Rock-Drills: Air-Compressing Machinery (H. thorn and Co.); Hathorn and (Co.'s Patent Reliance Air Compressor; Syphon Pamping Machinery: the Nickel Monopoly: "Miners' Rights"—Mr. Alex. Macdonald, M. P. (A. Macdonald); the Discovery of Lead Ore at Rhayader (E. Harvey); Pateley Bridge Mines; Dark Proceedings: Vale of Conway Lead Mines; Wheal Grenville, and its Management: West Basset Mine (H. Wad-lington); Great West Van Mining Company; Slate Quarries in Cardiganshire; Mining in Cardiganshire (G. Green); the Linrwest Mine, and its Detractors (Endean, Fisher, and Co.); Liurwest Lead Mine (Gregory, Whitaker, and Co.); Meeting of Tolgus Consols, Van Consols, Great Holway, and General Mining Companies, &c.

ZINC ORES.

ARMAND FALLIZE,
INGENIEUR-CIVIL, A LIEGE (BELGIUM),
BUYER
1.—CARBONATED AND OXYDED ZINC ORES (CALAMINE, &c)

2.—ZINC AND LEAD ORES MIXED TOGETHER, BUT DREES-ABLE KINDS ONLY

CAPPER PASS AND SON, BRISTOL PURCHASERS OF

LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, HARD LEAD, BRISS SLAGE AND ASHEE, COPPER REGULUS, MATTE, SCORIA, TIN ASHEE, TERNE ABHES, &c., and MIXED ORES or REFUSE, containing LEAD, COPPER, TIN, or ANTIMONY.

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May be personally consulted in London on all matters connected with Ore Dressing and Rock Drills, to which he has for years paid special attention.

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Exhibition Prize Medal-New South Wales, 1877. AUSTRALIAN TIN-"KANGAROO" BRAND.

Having recently succeeded in REFINING the AUSTRALIAN TIN to the HIGHEST PITCH OF PURITY, the Undersigned is prepared to SUPPLY an article equal to the BEST REFINED ENGLISH.

The uniform assay of the "Kangaroo" brand ranges from 99.70 to 99.90 pure tin. An exhaustive comparative trial of various brands of Australian tin (see

annexed report) have proved the

"KANGAROO" BRAND

To be superior to all other Australian tin, and equal to best refined English.

To be superior to all other Australian in, and equal to best renned English.

COPY OF REPORT.

"Sydney Galvanising Works, Sydney, Oct. 1, 1875."

"Dear Sir,—I have much pleasure in stating that I have found the tin smelted at the 'Kangarco' Tin Smelting Works superior to any other Australian smelted in I have used in my business up to the present time, and in no way inferior but quite equal to the celebrated 'Lamb and Flag' tin.

This opinion has been arrived at after several carefully executed practical tests, as well as from metallurgical assays.

"I am, dear Sir, yours faithfully,

"S. L. Bensusan, Esq."

Messrs. JOHNSON, MATTHEY, AND CO., the well-known

Assayers, report on 24th December, 1875, on a shipment ex Durham, 25 tons

Messrs. Johnson, MAITHEL, AND CO., the Well-known Assayers, report on 24th December, 1875, on a shipment ex Durham, 25 tons of "KANGAROO" TIN, 99-95 per cent. pure tin.

In ordering the "Kangaroo" brand the trade will henceforth ensure uniformity of quality, excellence of texture, and absolute freedom from impurity "KANGAROO" TIN SMELTING WORKS.

S. L. BENSUSAN. Sydney, September, 1877.

C. H. WALKER AND CO., MINING AGENTS AND ENGINEERS, VALPARAISO AND SAN IAGO, CHILE.

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MANGANESE, ARSENIC, FLUOR-SPAR, WOLFRAM, BLENDE, CALA-MINE, CARBONATE and SULPHATE OF BARYTES, ANTIMUNY ORE, CHROME ORE, MAGNESITE, EMERY STONE, PUMICE STONE, OCHRES AND UMBERS, CHINA CLAY, LEAD ORE FOR POTTERS,

MINERALS WANTED.

A DVERTISER requires REGULAR CONSIGNMENTS of GOOD SULPHUR ORE (PYRITES), either capreous or non-cupreous; also, GOOD BLENDE, and SOFT MANGANESE ORE. Address, "Pyrites," MINING JOURNAL Office, 26, Ficet-street, London, E.C. London, E.C.

MR. HENRY SEWELL, MINING ENGINEER,
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DIVIDENDS, ADVANCING STOCKS, SECURE INVEST-MENTS, RAILWAY SHARES, BONDS, &c.—The season is now on to make large and rapid profits from small outlay. Two or three Stocks should be bought at once with a certainty of doubling or trebing the money invested in one or two accounts. Particulars of Humz and Co., Crosby Hall Chambers, Bishopsgate street, London, E.C.

INVESTORS' HANDBOOK, 10s. 6d., post free.

SHARES, STOCKS, AND BONDS of every description.—
The Times, in the Money Article of Dec. 6th, 1877, says—"The Investors Handbook is a book of considerable value. It gives a good deal of correct information about English Railway Stocks, and also in regard to Mining Operations, as well as on investments generally it is worth reading." Published by CHARLES THOMAS, F.S.A., F.G.S., 3, Great St. Helen's, London .

Botices to Correspondents.

SWANSEA TICKETINGS—"J. F. K." (Water-lane).—The usual course is to consign the ore to one of the copper wharfingers at Swansea—Messrs. Henry Bath and Son, for example—with necessary directions, &c., to sell. The ore will then be sampled in the ortinary way, and come into the Ticketing about three weeks later. No smelter would buy at the ticketings upon samples taken in Germany by the seller.

LLANKWET AND ABERDAUNANT MINES. — We have received numerous letters during the week respecting the different statements which have appeared in various circulars. We always endeavour to avoid personal controversies; letters with names and addresses appended may be published, but anonymous letters will not be noticed.

ETAL QUOTATION—"C. W." (Wolverhampton).—The quotation 5364, for yellow metal sheating on Nov. 3 was, no doubt, a typographical error fo 636d; but it is difficult to trace the matter so long afterwards. Such enquiries can only be ratisfactorily answered when made at the time.

ratisfactorily answered when make at the time.

Rece ved,—"Empressario" (Dec. 6)—"P. E. G." (New York)—"L. B." wishes for information respecting West Maria and Fortescue—"Constant Reader" (New York): We will endeavour to get particulars—"Subscriber:" Our reporter attended the meeting of the North America Gold Mining Company, but was not allowed to take notes of the proceedings—"J. S." (Luton) had better consult a broker as to the course he should pursue. We presume he can act as he states his desire of doing—"Observer" (Parys Mountain)—"Reader" (Paris): Yes—"Chemist" (Manchester): We have not been able to obtain the information; we may, however, do so in time for next week's Journal—"W. T.: "A letter was addressed to Mr. John Rogers, in answer to enquirles, with the information desired, but it has been returned from the Post Office as "not known" at the address given—Mr. Palmer on the Chontales Mining Company shall speak in next week's Journal; as also Mr. Vassard on the Electric Light—"J. M." (Sticker).

THE MINING JOURNAL,

Bailway and Commercial Gazette.

LONDON, DECEMBER 15, 1877.

COLLIERY EXPLOSIONS.

In a recent Journal we published some correspondence between Lord Kinnaird and Mr. Macdonald, M.P., with respect to the Blantyre explosion, and the means that should be adopted to prevent the occurrence of such catastrophes in the future. From the general tenor of the letters it is evident that an effort will be made in the ensuing session of Parliament to make some addition to the Act of 1872 for what is stated to be the safer working of mines. The motives of Lord Kinnaird and the Member for Stafford are no doubt good, for they desire what all persons connected with mines are anxious to see accomplished—complete freedom from explosions. But, as we have pointed out frequently, the entire immunity from explosions in our collieries is simply an impossibility; and this opinion is fully borne out by mining engineers, colliery managers, opinion is fully borne out by mining engineers, colliery managers, and, indeed, by all persons who have any knowledge of coal mines, and the insiduous character of the gases found in them. Our colliery owners naturally do all they can, as a rule, to ensure the safety of their workpeople. For in so doing they are looking after their own property, and they complain of the frequent attempts that are made by some of our legislaters to alter the system of working our collieries by certain rules and methods that cannot be carried out. make by some of our release its after the system of working our collieries by certain rules and methods that cannot be carried out without entailing great inconvenience and serious loss, without any real-advantage. Those persons, however, who are desirous of seeing certain of their own ideas carried out are not practical men, and know but little about coal mines, though they presume to be far in advance of our ablest mining engineers, and are always prepared with a specific for preventing accidents from all causes in our collieries. The knowledge of our best men has been expected in collieries. The knowledge of our best men has been exhausted in finding the readiest way to avert possible accidents, and it is not to be supposed that ordinary outsiders who know little or nothing

about the getting of coal can do more than they have done, with their long and varied experience Lord Kinnaird, who takes such a deep interest in the working miners, and whose desire to benefit them no one who knows him miners, and whose desire to benefit them no one who knows him will question for a moment, is certainly not a mining expert, neither is Mr. MACDONALD, yet they have a remedy prepared in the shape of an addition to the present Act of Parliament, by which explosions are to be numbered amongst things of the past. But explosions take place for which our ablest men are unable to account, and for which, consequently, there can be no preventive measures specially prepared before hand. Of this there is plenty of proof, for not only in England, but on the Continent, eminent scientific gentleman have carefully collated the explosions which have taken place in coal mines, with the condition of the barometrical pressure. In England, Mr. Scott, the director of the Materological Office, and Mr. Galloway, one of the Inspectors of Mines, have paid a great deal of attention to the subject, and in some interesting diagrams prepared by them, showing the readings of the barometer diagrams prepared by them, showing the readings of the barometer and thermometer in 1872, at Stonyhurst, they say—"We have on the diagram 233 explosions, 70 per cent. fatal, of which we consider 135, or 58 per cent., to be due to disturbances of atmospherical pressure; 39, or 16 per cent., to be attributable to excessive heat of the weather; and 59, or 25 per cent., to be without a sufficient explanation on meterological grounds." The remedy proposed for preventing explosions from these varied causes appears to be what is known as the fire-damp indicator of Mr. ANSELL, of which both Lord KINNAIRD and Mr. MACDONALD have a very high opinion. It is, however, an opinion not abserted in by our scientific and practical mining. NAIBB and Mr. MACDONALD have a very high opinion. It is, however, an opinion not shared in by our scientific and practical mining engineers, who ridicule the idea of the instrument being of the slightest use in a colliery, and the views recently given with respect to it in the Journal by Mr. Brown, of Hednesford, are those entertained by the profesion generally. Had it been of any use whatever it would long since have been found in our mines.

With recard to the provisions proposed by Lord Kinnarra to be

whatever it would long since have been found in our mines.

With regard to the provisions proposed by Lord Kinnaird to be added to the present Act in the ensuing session of Parliament there are some that we agree with, whilst there are others that could not be carried out. Very few of our colliery owners we should say would object to the adoption of detaching hooks for cages and kibbles, and we are decidedly of opinion that no blasting or naked lights should be allowed in flery mines. On the other hand, we do not see the necessity of firemen being examined by a Government Inspector, and having a certificate of competency before being employed. A knowledge of gas and how to detect is not a very difficult matter, but that will not make a careless man do his duty efficiently, even had that will not make a careless man do his duty efficiently, even had he two or three certificates. What is required is steady men on whom reliance can be placed, and those the manager of a colliery can find better than anyone else, for he is in a great measure responand vertex than anyone each of the state of the machinery, and vertilation of the workings of the mines, to be made daily, and entered, in a book to be open to the Government Inspector he already in force Second General Rule in the existing Act it is provided that in all mines in which inflammable gas has been found within the preceding twelve months once in every 24 hours if one shift of workmen is employed, and once in every 12 hours if two shifts are employed, a competent person or persons shall before the time for commencing work inspect with a safety-lamp the working places and report the result without delay in a book kept at the mine for the purpose. It is also provided that in every mine where no inflammable gas has been found during the preceding twelve months the working places shall be examined once in every 24 hours, and the report written in a book. This we think is sufficient for all ordinary purposes, for the report can always be seen, whilst the men have the ower of appointing some of their own body to examine the mine.

Another alteration proposed is with respect to Government Inbectors. Lord Kinnair reiterates the statement that the present

plan of inspection is a farce, and we suppose considers that Inspectors should go into all the mines in the district and see that the nodes of working and ventilation were properly and efficiently carried out. As there are rather more than 4300 mines in the kingdom there would have to be a very great increase in the number of Inspectors, and they would take from the colliery owners and managers a great deal of the responsibility which we think justly attaches to them at the present time. In fact, to carry out such a proviso the Act of 1872 would have to be re-cast, without any advantage in the way of increased safety to the workmen. Accidents frequently take place which could not be averted by any amount of inspection. Outbursts of gas take place, often where least expected, not only from the coal, but from the floors of the mine as well, and in the latter case with a suddeness and force that nothing could prevent, and all that can be done is to have the ventilation active and the best of safety-lamps.

in the latter case with a suddeness and force that nothing could prevent, and all that can be done is to have the ventilation active and the best of safety-lamps.

The last proposal of Lord Kinnarro is "That all damages for loss of life or injury to person caused by neglect or non-observance of the Act be borne by the owners or lessees of the mine." Were this carried out, very few persons, we fancy, would care to become colliery owners, for they would have to pay a very heavy penalty for any act of negligence or carelessness on the part of a workman by which any of his fellows should be killed or injured. It is an impossibility for any employer of miners to see that the latter do not commit a wrongful act, unless they employed one man to watch another whilst at work. An owner employs as good a manager as he can get, provides all the necessary means for working a colliery on the best and safest principle, and having done that his duty ends. But it frequently happens that a workman by his recklessness not only loses his own life but is the cause of the deaths of many more, yet it is proposed that the employer shall be held accountable for such an act, and be compelled to maintain the family of the man who had done all the evil. Besides that, it not unfrequently happens that an explosion will cost a colliery proprietor some 15,000% to 20,000%, yet he cannot recover a shilling of that, although the loss may have been occasioned by a direct breach of the rules, even where the discipline is as strict as it can possibly be. The last Act of Parliament has been a costly one for the owners of coal mines, and to some extent it has been shared by the public by the increased price of coal, and we have no wish to see by means of another Act the cost of working made heavier than it now is. The owners of mines have plenty to do to sell their coal at a price that leaves them scarcely any profit to do to sell their coal at a price that leaves them scarcely any profit ing made heavier than it now is. The owners of mines have plenty to do to sell their coal at a price that leaves them scarcely any profit, not even ordinary percentage on the capital invested, and there is no reason why they, more than any other class of capitalists, should be subjected to one-sided, unnecessary, and vexatious legislation.

OUR EXPORTS OF IRON AND COAL.

The Board of Trade Returns issued for November and the eleven

OUR EXPORTS OF IRON AND COAL.

The Board of Trade Returns issued for November and the eleven months of the year are far from satisfactory, so far at least as those two important industries—iron and coal—are concerned. In both there has not only a falling off in the quantity exported, but a considerable decline in their value. In November, 1876, we are credited with having sent out of the country 189,173 tons of wrought and unwrought iron of the value of 1.735,7062, whilst for the same month of the present year the exports had fallen to 184,748 tons of the value of 1,633,6072. Of machinery and mill work last month contrasts must favourably with November, 1876, the values being respectively 592,4512, and 563,3962. But when we come to take the eleven months there is a marked change in the opposite direction, for the value in the present year so far was 6,146,6924, against 6,705,114. for the same months of 1876. Inhard-ware and cutlery there has also been a decline up to the end of November as compared with last year, the values being 3,055,7004, as compared with 2,16,0684. Our exports of coal show a considerable decrease for the present year to several countries where English coal has been litherto largely consumed. In one or two instances the war in the East may have been the material cause, although we are not aware that there has been any effective blockade by which coil could not reach the ports of either of the belligerents. The Baltic has been entirely free and open to a much later period than in former years. Russia. however, last month only took from us 12,710 tons, against 51,569 tons in November, 1876. For the eleven months of 1876 the quantity sent to that country was 1,165,691 tons, whilst for the last eleven months it was only 1,032,30k tons.

It is said by some of those gentlemen who are in favour of reducing our production of iron and coal so as to enhance their value that it is not in England alone that trade is in a depressed state, for it extends throughout the entire Continent, but this does not purpose, and is sold at a price which gives our own colliery owners in competition with them scarcely a cent. of profit. But they sell in the expectation of things improving, and to retain a hold of the markets they have long been connected with. That their profits are really trifling, we have only to see what their charges are. In the eleven months of the present year the average value of the coal expected was 10x 244 per ton and for the same period of last year it. eleven months of the present year the average value of the coal exported was 10s. 2½d. per ton, and for the same period of last year it was 11s. per ton. In November, 1876, the price was 10s. 6d., and last month it was 10s. per ton. That it is to the advantage of all persons connected with mines that our exports of coal should be maintained and extended does not admit of any doubt, for when they sensibly decrease—as some persons wish them to do—it will be a serious matter for the working miners of this country, for it would be the means of bringing the price of coal down to a very low point indeed so far from increasing its value.

OUR RAILWAY IRON ABROAD.

On various occasions we have called attention to the progress and increasing importance of the Australasian demand for our railway iron, and the atatistics which are now nearly complete for 1877 abundantly confirm all that we have published upon the subject. The exports of railway iron made by us to the Australisian group of colonies place our Antipodean dependencies in the third rank, in fact, among our external customers for railway iron. In November nise occupied indeed the foremost place having taken 8908 tons of our railway materie in that month, as compared with 3230 tons in November, 1876, and 6548 tons in November, 1875. The largest consumer of our railway iron beyond the seas has British India, the comparative activity with which the Anglo-Indian Government is proceeding with the construction of State railways, and the prosperity of the great guaranteed Indian networks, having made their influence unmistakably apparent in this year's returns. Thus in the 11 months ending November 30 this year British India took our railway iron to the very substantial extent of 89,547 ton-British India ompared with 50,875 tons in the corresponding period of 1876, 33,282 tons in the corresponding period of 1875. The figures encouraging as regards for November this year are extremely encouraging as regards our exports of railway matériel to our Indian possessions, the deliveries exports of railway matériel to our Indian possessions, the deliveries for that month having been 8887 tons, against 3760 tons in November, 1876, and 1602 tons in November, 1875.

Notwithstanding that Russia has had to sustain the strain of a great war with Turkey, the Russian demand for our rails and accessories has been pretty good this year. Thus Russia took from us in the eleven months ending Nov. 30 this year 79,986 tons of our railway materied the corresponding consumption in the corresponding period of 1876 having been 80,085 tons, and in the corresponding period of 1875 109,781 tons. In November our deliveries of rail-

way iron to Russia were also still proceeding upon a considerable scale, having amounted in that month to 8105 tons, against 908 tons in November, 1876, and 7607 tons in November, 1875. The Canadian demand for British railway material has been comparatively dull and restricted this year, having amounted to Nov. 30 tonly 36,001 tons, as compared with 59,833 tons in the corresponding period of 1876, and 84,750 tons in the corresponding period of 1876. The weakness of Canadian railway credit—a weakness which can excite no astonishment when it is remembered that there is carrely a single Canadian railway which gives its stockholders anything approaching to a decent dividend—has told with extreme severity upon the statistics of this year, and there does not appear to be much prospect at present of any increase being witnessed at present in the consumption of our railway material in British America.

present in the consumption of our railway materiel in British America.

The figures available with respect to the consumption of our railway iron in the United States are of a most melancholy and depressing character. It is true that there has been a slight—a very slight year, but still this consumption is but the shadow of its former self. In 1871 we sent the United States 512,277 tons of railway materiel this year, but still this consumption is but the shadow of its former self. In 1871 we sent the United States 512,277 tons of railway iron; the frightful falling off in the American demand which has occurred in the course of the last six years is painfully illustrated in the fact eleven months of 1877. It is true that in the corresponding period of 1876 the corresponding exports were only 349 tons, but still we repeat that our commerce with the United States in the matter of railway iron is but the shadow of its former self. It is at the same time satisfactory to note that the improvement which has taken place this year in the colonial demand for our railway materiel has rather sensibly helped up this year's figures, our aggregate shipments of railway materiel in all directions to November 30 this year having amounted to 456,057 tons, as compared with 388,670 tons in the corresponding period of 1876, and 521,833 tons in the corresponding period of 1876 were valued at 3.486,071L, the corresponding value of the 456,057 tons exported in the first eleven months of 1876 were valued at 3.486,071L, the corresponding value of the 456,057 tons exported in the first eleven months of 1876 were valued at 3.486,071L, the corresponding value of the 456,057 tons exported in the first eleven months of 1876 were valued at 3.486,071L, the corresponding value of the 456,057 tons exported in the first eleven months of 1876 were valued at 3.486,071L, the corresponding value of the 456,057 tons exported in the first eleven months of 1876 were valued at 3.486,071L, the corresponding value of the 456,057 tons exported in the first e

NATIONAL ASSOCIATION OF CERTIFICATED COLLIERY MANAGERS.—In accordance with the arrangements which have been made for holding a series of meetings in the principal colliery districts of England, on Saturday a meeting in connection with the association was held at Wigan, when the objects of the association were explained and discussed, and a deputation was appointed to attend the next meeting, which will be held at Birmingham.

NORTH AND EAST LANCASHIRE MINING DISTRICT EXAMINATIONS.—The Board of Examiners for the Mining District of North and East Lancashire met on Thursday at the Masonic Hall, Manchester. Mr. John Knowles presided; and there were also present as examiners Mr. John Waddington, of the Hargreaves Colleries, Burnley; Mr. John Ridyard, of the Bridgewater Collieries; Mr. Herbert Fletcher, of the Ladyshaw Collieries, near Bolton; and Mr. Horbert Fletcher, of the Ladyshaw Collieries, near Bolton; and Mr. Horbert Fletcher, of the Ladyshaw Collieries, near Bolton; and Mr. Horbert Fletcher, of the Ladyshaw Collieries, The examination papers comprise a series of questions regarding the provisions of the Mines Regulation Act, also questions upon Atkinson's Treatise on Ventilation and the Friction of Airways, and on Practical Mining; but there is, in addition to the written examination, a vica voce examination on the above and other subjects which it is necessary a colliery manager should be acquainted with. The examination is expected to last three days. Before proceeding with the business the board inspected the preparations which had been made by the secretary for conducting the examinations, and passed a resolution approving of them. A further resolution was passed expressive of regret at the recent death of a member of the board—Mr. Thomas Gregson, of Bolton—who was on the board in the capacity of a person "employed in and about a mine"—representing, that is to say, the interests of the working colliers. We understand that colliers in the district are invited to nominate for the vacant post any person whom they consider most suitable, and to forward the nomination to Mr. Dickinson. It will be by him communinated to the Home Secretary, with whom the appointment rests. NORTH AND EAST LANCASHIRE MINING DISTRICT EXAMINA-

IMPROVED SAFETY-LAMP.—Some trials have just been made at Glasgow with the "Protector Safety-Lamp." which has the advantage that the top of it cannot be removed without extinguishing the light. The light-yielding matter in the reservoir (a min-ral product named colzaline) is warranted to last 12 hours without the necessity of re-trimming. The colzaline gives a light 39 per c-nt. brighter than that of oil. From the nature of the light-yielding matter, and the small amount of soot thrown off by the flame, the gauze is not liable to get clogged with oil and soot.

COAL AND IRON IN THE UNITED STATES -The market has been quiet but steady for steel rails at Philadelphia; no sales of any spe-cial importance have been noted. The mills are pretty well supplied with orders at present, and are accordingly not pushing for business, and buyers are equally disinclined to do business at any advance. and buyers are equally disinctined to do business at any advance. Negociations are pending for about 25,000 tons at \$42 per ton, delivered at tide. These negociations are expected to be carried through in a few days. No change in the general condition of the trade is likely to occur at present. There are a good many inquiries for iron rails at Philadelphia, but no orders of importance have actually been placed. A good many small lots have, however, been sold. There has been little or no improvement in sheet-iron at Philadelphia, and the demand has continued uncertain and unsatisfactory. There is an absence of animation in the inquiry for plate and tank iron at Philadelphia, and the market has ruled dull and beavy. There is a fair demand for steel at Pittaburgh, Pensylvania, and the local manufacturers expect to have as much work as they can get through with until the close of the year. The aggregate production of anthracite and bituminous coul in Pennsylvania Nov. 17 this year amounted to 29 933.820 tons, against 18,710.33 tons in the corresponding period of 1876, showing an increase of 1,223,583 tons this year. The movement of coal and coke over the Pennsylvania Railroad to November 7 of this year amounted to 4,070,588 tons. Of this total 3 296,655 tons were coal.

LUBRICATORS. - Messra, HUNT and MITTON, of Birmingham, the ordinary metallic receptacle used for containing the lubricating liquid or compound of any desired shape or pattern, to the upper portion of which they arrange the lid or cover, and se-cured by means of the screw or any other suitable manner; and in this lid or cover they construct a circular plug, the uppe the lower part of the said plug is tapered, and when the lid is applied to the receptacle the plug finds. to the receptacle the plug finds a corresponding hearing upon the edge of the said receptacle and is prefectly secure and sound. The advantage aimed at by this invention is the adopting of the tapered plug secured by the screw, being continuous in its wear prevale leakage, and economical. Hitherto a joint has been made of rein by screwing or k soft metal by forcing the lid or cover the or in other cases the ordinary steam packing has been employed, but leakage always follows.

MAGNETIC NICKEL.—The magnetic properties of pure nickel have been lately investigated by M. Wild, of St. Petersburg, who procured a nickel magnet in the form of a flat pointed bar, made by Wharton, in Philadelphia. The results are—I. Pure nickel takes as compared with the behaviour of pure soft iron, a considerable quatity of permanent magnetism; but the maximum of this isoally half to a third the permanent magnetism which may be acquired by hard steel.—2. The magnetism remaining in nickel after cessation of the magnetism force is less permanent than in well hardened steel; the gradual loss of magnetism in course of time, both in in well hardened steel; the gradual loss of magnetism in course of time, both in in well hardened steel; the steel, been brought to a certain state of premanent.—2. The temperature co-efficient of nickel magnets in the latter state is less that that of well-hardened steel.—4. The temperary magnetism which pure nickel quires is about double its permanent magnetic moment, half of the temporary

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nickel have , who pro-r, made by kel takes as magnetism which hard steel can acquire, and a fourth of that which soft iron can squire. In its magnetic behaviour nickel is thus throughout subordinate to steel ad ion.—Scientific American.

REPORT FROM CORNWALL.

REPORT FROM CORNWALL.

Dec. 13.—Matters are very dull here now, so far as actual business is concerned, though even to this there are some exceptions, and the Christmas fat stock shows with their accompanying dinners, which are being held in every part of the county, are one of the chief subjects of interest. The fall of Plevna, pointing, as it may be presumed to do, to a speedy termination of the war, appears to give ground for a rapid improvement in prices in the new year. It is to be hoped most fervently this may be so, for the sake of all who are interested. Meanwhile, we cannot expect any definite change for the next two of three weeks. Christmas is a notable disturber of business. The heavy rains, of which we have had so much lately, though during the past few days there has been some improvement, are now telling, as we predicted must be the case ere long, seriously on the pumping power of our mines. A great deal more attention is, howers, now paid to pitwork than used formerly to be the case, and these extra times of pressure are, therefore, better provided against. Owing to the general wet seasons we have had of late the ground is of fally charged with accumulated water that a moderate rainfall now has much the same effect as a heavy rainfall under ordinary discussances.

sentrat mises of pressure are, therefore, better provided against, sentrat mises of pressure are, therefore, better provided against, as fully charged with ascumulated water that a moderate rainful and was much the same effect as a heavy rainful under ordinary ignessions.

An excellent leature on the "Proparties of Tine" has been dolivered by Dr. R. Olander, E.C.S., at the Plymouth Institution. After region of the properties of the properti

TRADE OF THE TYNE AND WEAR.

Dec. 12.—A good business continues to be done at the shipping places on these rivers in gas coal. The House Coal Trade is comparatively inactive, owing to the mildness of the season. The demand for manufacturing coal and small coal is poor, at low prices—for puddling 5s. per ton, and for small 3s. per ton is realised. for puddling 5s. per ton, and for small 3s. per ton is realised. Rese prices contrast strangely with those paid during the coal famins in January, 1873, when the average price of coal in Durham was 15s. 10d. per ton; in April, 1874, it was 12s. 8d.; and at the shittation before Mr Shaw Lefevre the price stated was 5s. 8d.; at the present time it is 5s. 3d. In 1873 coke rose to 45s, per ton; at the present time best coke brings 11s., and the demand for coke continues fair. The total exports, foreign and constwise, from the North Eistern ports during November were 1,010,185 tons, against 1,019,393 tons in the same month of 1876, so that the falling off is not very great. In Durham the collieries are in a much better position, so far as employment is concerned, than in Northumberland, as agreat variety of coal is produced, and the works are, some of them, kept going regularly, while others are engaged about three-log, as it is likely that a number of furnaces will be blown out flortly, and this will still further reduce the demand for manufacturing coal. Unless a revival of trade occurs more collieries will no could be closed before the trade can be got into a healthy state. There was some excitement in Newcastle on Tuesday on the arrival of the news respecting the fall of Plevna, as this may lead to the

speedy stoppage of the war. There is a great trade between the Tyne and the East, and the business in railway material has been much checked by the diseastrous war.

The Steam Coal Trade in Northumberland is extremely bad, this coal having ton great extent been driven out of the market by Soctiand, the Midland, and other districts, at lower rates than can be accepted here. In Southand hard steam coals are now shipped as accepted here. In Southand hard steam coals are now shipped as accepted here. In Southand hard steam coals are now shipped as accepted here. In Southand hard steam coals are now shipped as accepted here. In Southand hard steam coals are now shipped as accepted here. In Southand hard steam coals are now shipped as a composition of the Bishape Castle Railway as a composition of and the only chance the masters above at present is to reduce the cost of raising, so as to enable them to compete with other districts. The notice given lately for a reduction of 12½ per cent. on coal havers rates, and other wages in proportion, has been done with a view to effect this, but the men have not as yet accepted this reduction, and they propose to submit the question to arbitration, but this course the masters object to very strongly. It is quite possible that this may result in a stop, so far as the associated collectics are concerned, but a considerable number of works will still be worked to the course the masters object to very strongly. It is quite possible that this may result in a stop, so far as the associated collectics are concerned, but a considerable number of works will still be worked to the course the master object to very strongly. It is quite possible that this may result in a stop, so far as the associated collectics are concerned, but a considerable number of works will still be worked to the course. In the county, it is not so marked as it was some few w

that those working are making short time, and that large numbers of miners are unemployed.

Colliery owners are anxiously awaiting the issue of the draft of the proposed new Mines Drainage Bill. Th-y declare that the Act will meet with much opposition, especially if, as is intimated will be the case, it is proposed to include the Oldbury district again within the area. Dissatisfaction is expressed that up to the present the Bilston owners have not been informed whether the petition which they have presented for the cutting off of that district from the operations of the Commission is possessed of the requisite signatures.

the Bilston owners have not been informed whether the petition which they have presented for the cutting off of that district from the operations of the Commission is possessed of the requisite signatures.

A provisional arrangement has been concluded between the directors of the Horseley Company (Limited) and Mr. P. D. Bennett, of the Spon-lane Works, Birmingham, for the amalgamation of their respective businesses on Jan. 1 next. The arrangement involves the purchase by the Horseley Company of the business of Mr. Bennett, who will assume the managing directorship and the chairman-hip of the unit-d concerns.

The Fig. iron Trade is dall. The output is in excess of consumption, and preparations are in hand for decreasing production. Two furnaces in Dudley are shortly to be blown out. One is situated at Park Head, and belongs to Mesers. Phillips and McEwen, and the other at Corbyn's Hall, and is owned by Wm. Matthews and Co. (Limited). When these furnaces are outabout 44 will be the number blowing. In prosperous times as many as 90 would be in blast. The altered state of things is very evident from the fact that iron masters who can look back no more than 20 years can recollect when no fewer than 130 furnaces were on in South Staffordshire and East Worcestershire: 4l. for all mine, and 2l. 5s. for cinder qualities are the open market quotations. The finished iron trade is without conspicuous change. That a certain portion of the Shrubbery and Swan Garden Fini-hed Ironworks in Wolverhampton, owned by Messrs. G. B. Thorneycroft and Co., will in all probability be kept on after Christmas is highly gratifying. A new company are negotiating for the concern, and 45,000l. is the purchase-money. The property in ordinary times would fetch, perhaps, four times this amount. It is rumoured that the Midland Railway Company are the purchasers.

The well-known tabe making firm of Whitshouse and C., Limited). Wednesbury, have gone into liquidation, with unsscured debts about 2500l. John Thomas Royce, of the Phemix Tabs Works, Ti

The pig-iron trade is very depressed. More coal is being mined than can be consumed.

A curious case under the Mines Regulation Act has been heard at Sedgley Police Court, Mr. J. P. Baker, the Government Inspector, laying informations against the officers of the Tipton Moat Colliery. In a shaft not used for drawing men, two men who were repairing the shaft were killed by being thrown to the bottom through the brake not acting, and the information was laid for infraction of rules in having inadquate brake, no indicator, and so on. It was urged in defence that the indicator was not used because men never went up and down the shaft, and the Bench cou'd not see sufficient evidence to convict, also giving the defendant the benefit of the doubt as to the insufficiency of the indicator had it been used. Case dismissed. Messra, J. Shepherd, the competent person; Jackson, of Leeds, late engineer; and G. Price, the engine-tenter, were each fined 5, and costs for infraction of rules. 5. and costs for infraction of rules.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Dec. 12.—The Coal Trade is said to be slightly better, but both in the Mold district and that of South Shropshire, as well as in the forest of Wyre, there is a breaking up of some of the smaller enterprises started in 1872-3. This was to be expected, some of these were opened where they were never likely to pay—in networks of faults in the thin seams above the millstone grit, in the grit itself, and in the thin uncertain seams that like at the top of the ceal means. faults in the thin seams above the millstone grit, in the grit itsen, and in the thin uncertain seams that lie at the top of the coal measures. Pig-iron has declined 1s, to 1s, 3d, per ton on the prices of last month. The Plaskynaston Collery Company have very properly prosecuted one of their colliers who surreptitiously fired a shot in workings where this was forbidden. The magistrates fined the man 1l. and 7s. costs. Mr. John Pryor, of Mold, died suddenly last week. Mr. Pryor had been connected with the Llauarmon and other mines of the district for years. He was also a partner in the Alltamani Colliery, near Mold. He took a great interest in mining enterprise generally, and his name often appeared in the Journal.

Considerable interest is being excited by the proposal of a gigantic scheme to supply the town of Liverpool with water from one of the upper streams of the River Vyrniew, a tributary of the S-vern. It is proposed to dam up the valley of Lianwddyn, about 10 miles south-east of Bala Luke, in the midst of the Berwyn Mountains. A lake would be formed 4½ miles long and 1½ mile wide, and about 400 ft. deep. The water is said to be of excellent quality, the supply abundant, the groun I favourable for engineering works, and the

400 ft. deep. The water is said to be of excellent quality, the supply abundant, the groun I favourable for engineering works, and the valley remote and comparatively unfrequented. It is argued that

REPORT FROM THE NORTH OF ENGLAND.

REPORT FROM THE NORTH OF ENGLAND.

Dec. 13.—Without doubt the present position of affairs in the North of England Iron Trade is such as to call for much anxiety and alarm. Week succeeds to week, and month to month, without in the least degree diminishing the dangers and difficulties in which the staple industry of Cleveland is enveloped; but, on the c.ntrary, there is every prospect of a long continuance of the depression that now makes the wealthiest feel the pinch, and drives all others to the wall. It is now on the cards to blow out a number of blast-furnaces with the view of bringing the demand more nearly abreast of the supply. This project will be discussed at a meeting of the Ironmasters' Association to be held on Tuesday next in Middlesborough. It is not definitely known how many furnaces may be blown out, but there is every probability that a dozen at least will be extinguished; and the effect of this reduction would undoubtedly be to aid the iron makers in maintaining the attitude they have assumed with respect to the regulation of prices. At their meeting, on Tuesday, the ironma-ters of Cleveland decided to remain firm to the rates they have quoted for the past three weeks; and as no abatement could be obtained from this source, consumers sought out meeting the producers that the contents who had stocks of iron to dispose of, and endeavoured to place orders at something less than producers' terms, which were ba-ed on 41s. for No. 3. But merchants have only a small quantity of iron in hand, the great bulk of the accumulated stocks being in the hands of makers, who have now close on 250,000 tons stocked at works; and if the producers' league remains firm to itself, merchants will soon be prevented by the total absence of resources from underselling them on any terms. The foreign export trade remains very dull. Less iron is being sent to Germany and France than at this time last year; and, indeed, the present political crisis in the latter country seems to have entirely paralysed the energies and confid

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Dec. 13.-No material change has taken place in any of the lead-Dec. 13.—No ma'erial change has taken place in any of the leading industries of berbyshire, and business goes along in a quiet and routine manner, better things being looked forward to. Lead mining has undergone little change, the quantity of ore raised being very moderate. Some of the collieries have been working pretty well, but at others four days a week has been the extent. House coal goes off very well from Clay Cross and other leading places to the London market, where the competition between the inland and the seahorms. market, where the competition between the inland and the scaborne coal is still pretty keen, the latter having a considerable advantage in the shape of a low carriage rate. The business doing in steam coal has fallen off, the consumption at home, as well as our exports, as is usual at this time of the year, not being so large as during the summer months. In other descriptions of coal the trade is without quotable alteration. Makers of pig-iron still complain of the moderate demand and the low prices which prevail. The foundries appear to be going on moderately well, whilst the Bessemer establishment is as active as ever in the rolling of rails.

Rather more activity is diagraphic in several branches of the

ment is as active as ever in the rolling of rails.

Rather more activity is discernable in several branches of the Sheffield steel trade, which will be agreeably felt by many workmen who have long been on short time. A slight improvement has taken place in crucible steel of different qualities, more particularly for fine cuttery. America has been sending some fair orders for table, pen, and pocket knives, whilst more in some of these articles is being done with the Continent. Home travellers also report a little more business but as awall customers at this time of the year mercly. There was some excitement in Newcastle on Tuesday on the arrival jections applicable to the Manchester Thirlmere scheme in spoiling of the news respecting the fall of Plevna, as this may lead to the laplace of public resort cannot be urged against this. The conserare now busy in useful and ornamental work suitable for presents or for the table in the case of parties. Bessemer rails are still being largely produced, and there is every appearance of the business doing in them being goof in the ensuing year. Russia is again becoming a goof customer for them, whilst not much is being done in ordinary rails or general railway material. Plates and sheets are still quiet, and the heavy branches of the trade are by no means well off. The Parkgate Company appear likely to show to advantage next year, being favourably off for plates, although the directors have recently issued a circular stating that no interim dividend could be declared. Some of the foundries are rather better off in light work than they were a week or two since, with some prospect of its continuing. The collieries in South Yorkshire have been working tolerably well, as the business in house coal has kept fairly up, considering the active competition which prevails, owing to the production being in excess of the consumption. But this cannot be remedied until such times as we have a revival of the iron trade, and once more see all our furnaces in blast. Any attempt to interfere with the course of trade by keeping down the output is sure to fail, although for a time some persons would be losers and others gainers by it. Prices of house coal, however, are certainly low, particularly for the season, yet they have not influenced the make of pig-iron, as might be expected. Iron, it is true, is also low, but then the demand is so very moderate that no material advance can be expected. There is, however, a strong feeling that trade generally will be much better in the early part of next year, and there are certainly some indications in that direction.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

Dec. 13.—The Iron Trade may be described as in a stationary condition, so far as the amount of work in hand at the local establishments is concerned. There is no doubt that the rail trade has improved, but it is said that prices at which recent orders have been taken are lower than those which prevailed at the beginning of the year. Taking into consideration our large producing capacity, the shipments made have been very small. At the steelworks there is a fair amount of activity prevailing, as usual, and one or two are well supplied with orders. The bar-iron department is anything but satisfactory, and prices are again receding. Pigs are in slightly better request. The Tin-plate Traie shows more animation, this being apparently due to the restriction of make which has been enforced. Some are sangular enough to predict that the men will work full time when the new year sets in. As will be observed by the figures given below, in every case coal shipments for last month show a large decrease computed with the corresponding month of the previous jear. In the case of Car liff alone it by have fallen off to foreign ports to the tune of something like 12,000 tons. This is due not altogether to the decline of the foreign cenand, but as well to the fact that the movements of shipping have been impovement in clearances, but the steam coal trade continues rather dul. House qualities are fairly active, but patent fuel is dull; and Messrs. Cory and Yechavo just been obliged to suspend 200 of their men at their works at Swansea. A company have purch set Mardy Collieries, Merthyr, from Mr Mordecal Jones, and procession has already been taken. The company are about to sink fresh coal measures, and consequently the employees are to be discharged.

During last month N woord clear at 2870 tons of iron, against 3480 tons in the corresponding month of 1876; Cardiff, 8690 tons against 5865 lons; and Swansea, 481 tons against 2025 tons. The principal dearances were to the following ports:—

with 12 105 tons.

Twenty-three colliers have been summoned at Neath by the manager of the Maesmarchag Colliery for breach of contract. It was alleged that the men had combine to limit the output in consequence of being called up to cut a particular description of coul at reduced rates. An amicable settlement was come to, and no order was made on the summons.

It is needless to comment on the report given below of the meeting of the Nanty Glo and Blaina Company, as it speaks for itself. It is now reported that there is a movement on fout among the shareholders to replace the present directors by men more accustomed to and having a practical knowledge of the district.

NANT-Y-GLO AND BLAINA IRONWORKS COMPANY.

The annual meeting of shareholders was held at Manchester on Monday (Mr. Hugh Mason in the chair), when the directors' report was taken as read. It showed a loss of 45,000% on the year's trading. The Chairman, in moving the adoption of the report, entered into a lengthy explanation of the several heads. He stated that the directors had decided upon sub-letting the leasehold part of the property, and he hoped that that would eventually bring them out of their difficulties.

their difficulties.

Mr. Ogden criticised the report and the Chairman's remarks in a long and exhaustive speech. He complained in bitter terms of the Chairman's ignorance of the business, of his dictatorial conduct, and of his unwise interference in the management of the works. He pointed out that the Articles of Association required that the number of directors should be at least five, when they only had three, and it appeared that Mr. Mason usurped all the powers of the Board, and did everything as he pleased, without consultation with the other directors. In the three years that Mr. Mason had been at the head of affairs they had lost hearly 150,000L, and he had no hesitation in asserting that they would soon be in liquidation if this state of things continued. He compared the Chairman's remarks twelve months and two cears ago, and showed that the figures then given had proved wholly unreliable; and he came to the conclusion that the present balance sheet must be taken as equally so.

180,0001. and he had no hesitation in asserting that they would soon be in liquidation if this state of things continued. He compared the Chairman's remarks twell e months and two oears ago, and showed that the figures then given had proved wholly unreliable: and he came to the conclusion that the present balance sheet must be taken as equally so.

Mr. Isaacson, a director, fully endorsed Mr. Ogden's remarks, and gave several instances in which the Chairman had acted without his authority in any way, and he protested against the business of the company being managed in this manner. He was a shareholder to the extent of nearly 30,0001, and he had far more interest in the property than Mr. Mason had. He consequently endeavoured to look after every penny of the sharehollers' money. They paid 1850, commission for the transfer of a morigage, which ought never to have been done, and the compromise of 40,000. with Messrs. Carlton and Grant was most inadequate. Long ago he coult have got 60,0001 to compromise the suit, but Mr. Mason then absolutely refused te entertain the offer, and yet he now took great credit to himself for having settled it for 20,0001, less.—The Chairman was most inadequate.

Mr. Isaacson appealed to Mr. Ogden as to whether an agreement had not been unbustted in which 20,0001, was the basis of a settlement, and he believed even more could have been got.—Mr. OgDen confirmed Mr. Isaacson's statement, he being on the board at the time, and the reason he had retired was that it was impossible to work with Mr. Mason.

Mr. RUSSELL Evansexpressed his great surprise at the extraordinary revelations that had come out, and he had reluctantly come to the conclusion that, to say the least, the Chairman was scarcely the man for the position he had field. He hoped for the sake of the company and the district that some effort would be made to put matters on a more assistancery footing. Let them have at any rate a united board, and men of practical experience upon it. It was quite clear they could not go on as th

COMBMARTIN.-The lode in the 15 east presents the most promising f-atures for an important improvement as the level is extended. The object in driving the level is to get under the fine indications seen in the lode at surface, a few fathoms in advance of the point up to which the level is driven. The agents are very ful as to meeting with success. The new lode in the trial shaft shows a favourable aptearance, add it is thought that the new adit level cross-cut will intersect the south lode in about 6 fins, further driving. It will thus be seen that there are three promising and interesting points in process of development at the mine.

and interesting points in process of development at the mine.

Livingstone Consols.—The reports from Capt. Divey, of Wheal Kitty (St. Agnes); Capt. Nancarrow, of Camborne; and Capt. White, of Pesvor, will appear in next week's Journal. A very general and favourable opinion prevails concerning the future of this property, and it is considered that the favourable opinions expressed by inappectors have been understated rather than otherwise. A report from the manager as to the work being done appeared in the Journal of these life.

SOUTH MOLTON CONSOLS. - The 22 is expected to be drained by to-day. Some men are stoping in the back of the 12, and breaking excellent work for lead, a pile of which will be hauled to-day. In the bottom of the 12 there is a splendid lode of solid lead, but this cannot be worked until the 22 is drained, and the rise communicated with the winze below the 12. The mine is well provided

with all appliances for returning the ore, and dressing operations

WHEAL AGAR.—The engine-shaft is sunk 1 fm. below the 205 fm. level. The 205 is being driven east by nine men, in a rich lode of of tin, whose walls, north or south, have not yet been cut. We have 22 men stoping the north part of the lode, north of shaft. The menergaged in prosecuting other parts of the mine are putting in skiproad, which we hope to complete next week. This will greatly facilitate our working, and put us in a better state than the mine has yet been in.

THE SCOTCH MINING SHARE MARKET-WEEKLY REPORT AND LIST OF PRICES.

During the past week the market has been quiet. The last account of this year, commenced on Monday for Dec. 28, is always a quiet one, still a time investors would do well to take advantage of, in view of the briskness which sets in with the turn of the year, There are numerous indications also of an agreeable improvement in Stock Exchange business, and, therefore, in prices of securities, which will be most advantageous to those who purchase before prices become buoyant. In shares of iron and coal concerns, Bolekow, Vaughan, A, have advanced 15s, per share on the week. Glasgow Port Washington (prepaid) 8s, and Scottish Australian (new) 1s. 3d., while Nanty-9Glo and Blaina (pref.) are reduced 10s., Glasgow Port Washington cordinary) 7s. 6d., and Marbella 5s., Benhar and Ebbw Vale are in request, while Lochore and Capledrae are still dull. Ambergate are at 80s. Andrew Knowles and Sons, 42s. 6d., prem. Bolekow, Vaughan, A, 534 to 53b; ditto, B, done at 35, but about 34 would now be paid; and ditto (pref.), 20l. 1s. 3d. Bowesfield, 40. Cardiff and Swansea, 21s. 6d. Henry Briggs, A, 134. John Baganal and Sons, 65s. Leeds and Yorkshire, 60s. Llay Hail, 7½. Llynvi, Tondu, and Ogmore, 64. Nanty Glo and Blaina (def.) 30s. Newport Abercara, 42s. 61. New Sharlston, (pref.), 70s. to 55s. Norwegian Titanic, 40. Scottish Australian, 32s. 6d. to 37s. 6d.; ditto (new), 8s. 9d. to 10s. Skerne, 5 to 54. Sheepbridge, 734. Tibbington, 10s. Treiegar, A, 10. Turnbridge, 9. West Cumberland, 7... West Mostyn 12 per cent. (def.), 6. Whitwick 6 per cent. (pref.), 104. In shares of foreign copper concerns like the Tharist and some others must have a great rise. Cape have advanced 20s., and Tharist the same; while Rio Tinto shares and 5 per cent. bonds are each 13s. lower. Yorke Peninsula immer at 0s. A dividend of 11s 6d. a share is olio, 35s.

In shares of home mines Glasgow Caradons, on the improvement in the copper market, have been in request, and are raised 2s. The next sale of copper ore by

tendency a toward. It ecoper recovers permanenty to a time same as of concerns also, and Tharsis the same; while Rio Tinto a lares and the secult bonder each 15s. lower. Yorke Peninsula firmer at 6s. A dividend of 17s 6d. a share is bayal ion Cape shares on 24th inst. Thirst's 5 per cent. debeuters have been suppared to the proper of th

The following Reports were too late for insertion in their proper place:—

NEW TYLLWYD.—Dec 13: The lode in the forebreust of the 20 driving east from the cross-cut is 3 wide, composed chiefly of clay-side, with small speeds of spar intermixed with it, but no lead ore of any value is to be seen in the end. A few feet back from the forebreast, however, a very nice branch of lead ore was met with it the bottom of the level. This branch of ore is about 2 in. wide, but only reaches about 1 ft. from the bottom of the level, and runs considerably more to the next than the ordinary course of the lode. I am of opinion that this will not continue for any length, but I have instructed the men to put a lew shots in the side in order to prove it. I have put the men to drive west from the cross cut at 7t. 15s. per fathom, and to clear stuff as usual.

SOUTH DARBEN.—H. James, A. Gundry, Dec. 13: Setting Report: The 80 end, to drive by six men, at 8t. per fathom; lode still unproductive. No 1 stope in back of the 80 has been suspended, lode being cut out by flats of poor ground, No. 2 stope, to four men, at 4t. per fathom; value 8t. per fathom. A stope in same level, to four men, at 4t. per fathom; value 8t. per fathom. A stope in bottom of the 70, to four men, at 4t. per fathom; value 8t. per fathom. A winze to sink in the 70 at 12t. per fathom. The men from the 90 stopes are still engaged stoping out ore ground in the bottom of the 70 at 2t. 10s. per fathom; value 8t. per fathom. All being well these men will resume their bargains in the 90 stopes next week. All the machinery working well.

2 LISBURNE BUYER of Don Pedro North del Rey, 500 Shares; Flagstaff, 50 Shares. Address, H. Wilkins, 3, Heybourne Villas, Tottenham, N.H.

M R. J. S. M E R R. AND ANALYTICAL CHEMIST,

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER.

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20. Argentine, £2 12s. 6d.

20. Argentine, £2 12s. 6d.

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25. Birdseye Creek, 14s. 9

30. Last Chance, 17s. 6d.

25. Colorado, £2 1s. 3d.

30. Cambrias

25. Chicago, £2 1s. 3d.

30. Quebrada, £2 11s. 3d.

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30. Marke Valley, 17s. 6d.

30. Marke Valley, 17s. 6d.

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30. Pestarena, 6s. 3d.

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40. W. Godolphin, £1 1st.

40. W. Gavel Pidge, £2 1st.

40. W. Gavel Pidge, £2 1st.

40. V. Tankerville, 1st.

40. W. Gavel Pidge, £2 1st.

40. W. Gavel Pid

NOTICE OF NEW ADDRESS.

NOTICE OF NEW ADDRESS.

M. R. GEORGE BUDGE, STOCK AND SHARE DEALER, begs to inform his olients that he has HEMOVED his BUSINESS from 4, Royal Exchange Bulldings, to—
No. 9, GRACECHURCH STREET, LONDON

Mr. Budge has dealings either as Ruyer or Seller, at close net prices, in Caron, Lisburne, Devon Great Consols, Marke Vailey, Great Laxey, Grogeinion, Lisburne, Devon Great Consols, Marke Vailey, Wye Vailey, Hedford United, Exchequer, Richmond, Fromtino, Bouth Autora, Last Chance, Red Rook, Flagstaff, Eberhardt, South Cwmystwith, and Chontales.

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SPECIAL BUSINESS in SHARES of the CARON LEAD MINE Limited. This crey promising mine is situated near to the Lisburne and Grogwindon Mison, and contains parallel loids thereto. All the capital is subscribed, and the works are in full operation. Sales of lead will commence directly the new discussioning machinery is [completed. These shares are strongly recommended for an early rise in price Present quotation, 23-4; to 31, at which Mr. Budge is prepared to deal. Full particulars on application.

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8 6	Adam Eyton,
14 6	Walker, Parker, and Co
5 0	Panther Lead Co.
5 0	ditto.
	ditto
	Weston, Son, and Co.
10 6	Mining Co. of Ireland.
ν 6	ditto
	Panther Lead Company
	6 6 8 6 5 6 10 6 9 6 5 0

Date		1	Min	es.		Cone	1.	Pri	00	per	10	12 .	Purchasers.
CC.	6-	Kings	ton	Conse)le	45		L	3	16	0	******	Vivian and Sons.
,	-	87	am	0	*** *	25			3	0	6	*****	ditto
,	10-	dista		*******		7.	*****	**	2	14	9	*****	ditto Dillwyn and Co.
	_	ditto	****	******		75	*****	**	9	14	6	*** **	Richardson and Co.
		dieto	****				14 144	**	_		-	*****	Michardson and Co.

COPPER ORES.

		cam	plea Nov	. 28	, and	3 80	old at Swans	ea, I	ec. I	1.			
	ons.	L'E	oduce.	k'ı	rice.		Mines.	Tons	. P	roduce.	Pr	lee.	-
Betts Cove	.121		10%	£6	6	6	Union Ore .	100		83/4	8	9	
ditto	.120		1014	- 6	7	0	ditto	100		64	3	9	
ditto	.120		10%	6	8	0	ditto	100		61/4		11	
ditto	.120		1034	- 6	7	6	ditto	100		61/4		11	
ditto	.100	******	10 %	6	8	6	Aljustrel	80		434		11	
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Setts Cove Ore1158 Valou Ore 603 Lijustrel Ore 239		20	36	17	6	Tigrony	Precipit.	. 20	 361	10	0
COMPANIES	BY	WE	10	M 1	rH.		WERE I				

	COMPANIES BY WHOM THE OKES		E PUE	CHAS	ED.		
	Names.	cons.		Ame	oun	t.	
	Copper Miners' Company	102		€ 321	6	0	
	P. Grenfell and Sons	101	*******	310	11	6	
	Nevill, Druce, and Co	203	********	1,283	11	0	
	Vivian and Sons	437	*******	1,489		0	
	Williams, Foster, and Co	239	*******	619		6	
	Mason and Elkington	404		1,380	19	0	
	Landore Smelting Company	770	********	4,179	7	6	
	Total	2256	******	£9.584	7		
10	SALE on Dec 25.		********	beetwee			

TOTALS AND AVERAGES.
Produce. Price. Per unit. Standard.... 7 5-16 ... £ 4 5 0 11s. 6d...... £84 18 2 COPPER ORES.

Mines.		Tons		P	rio	в.	Mines.		Price.
West Tolgus		. 70		£3	3	6	East Pool		
ditto	**********	. 66		6	15	6	ditto	15	
ditto	**********	. 65		7	1	6	Wheal Basset		
ditto		. 61		8	1	0	ditto	28	. 6 11
ditto	941111111111	. 52		8	10	0	Carn Brea	35	. 1 7
ditto		. 46		3	11	6	ditto		
Mellanear		. 75		3	7	6	New Cook's Kitchen	26	2 15
ditto		. 73		3	11	0	ditto		
ditto	************	. 71		3	14	0	West Basset		
ditto		. 64		3	6	0	Tywarnhaile	40	. 1 3
ditto	************	. 43		3	18	0	South Condurrow	36	. 8 1
West Seton		. 58		4	4	6	Penstruthal	34	. 4 1
ditto				3	13	6	North Treskerby	25	. 4 4
ditto	************			. 3	15	6	West Poldice		
ditto		33		4	3	6	Wheal Agar	9	
ditto	*************			4	3	6	South Tolcarne		
South Croft	V	. 55	******	2	10	6	Cook's Kitchen	8	. 3 10
ditto					3	6	Rule's Precipitate	9	. 11 0
ditto	************			. 1	4	0			

West Tolgu	s	360	*****	£2043	15	6	Tywarnhaile	40 £	181	0
Mellanear		326		1153	17	8	South Condurrow	36	191	To.
West Seton		202		808	17	0	Penstruthal	34	138	11
South Crof					1	6	North Treskerby .	25	105	0
East Pool .				149			West Poldice		58	10
Wheal Bas					15	6	Wheal Agar	9	45	10
Carn Brea					10	0	South Tolcarne	7	17	18
New Cook's	Kitch.	50	******	192	14	0	Cook's Katchen	8	29	13
West Basse					16	0	Rule's Precipitate.	9	23	ı
						-	Average produce			7

..... £5846 13 0

COMPANIES BY WHOM THE ORES	WERE PUR	CHASI	ED.	t.
Names. Vivian and Bons	419		3	- 6
Vivian and Bons	010	755	3	0
Grenfell and Sons	. 210		2	3
Nevill, Druce, and Co	. 219/5		6	0
Williams, Foster, and Co	. 104		18	-
Mason and Elkington	. 147			3
Charles J. Lambert	, 257%	1030	0	_
Total	1470	£8846	13	0

MO SALE on Thursday last, December 13.

Copper oves for sale at the Royal Hotel, Truro, on Thursday next—Mines and parcels.—Devon Great Concols 963.—South Caradon 470—Marke Valley 345.—Giss gow Caradon 265.—Hingston Down 193.—Wheal Orebor 164.—Gawton Copper Mines 183.—West Maria and Fortesoue 122.—Bedford United 115.—East Caradon 60—Frice of Wales 38.—Wheal Friendship 19.—Belstone 19.—Gomamens 8.—Total, 3881 toni.

COA RIMITA PIST EXAMINA

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FOU THE D AND THREE or annum, pay This railw Portishead is worked it is already in and will be vear. Address,

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t-Mines and liey 345—Glas-n Copper Mine ion 60—Prince ial, 2851 tons.

.... 7% 6 tons & ewts. COAL MINES REGULATION ACT, 1879.

MANUSCRIPTION FOR MANAGERS CENTIFICATES OF COMPETENCY. DISTRICT UNDER THE CHARGE OF JAMES WILLIS, Esq., H.M. INSPECTOR OF MINES.

PERSONS desirous of being EXAMINED in this District for MANAGERS CERTIFICATES OF COMPETENCY, under the abovement of the above of the above mentioned, district, at the following address: — 17, Fortland-terrace, Kescalieon-Tyne.

By order of the Board, CERORGE SOUTHERN, Secretary, N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY. DISTRICT UNDER THE CHARGE OF JAMES BAKER, Esq., H.M. INSPECTOR OF MINES.

PERSONS desirous of being EXAMINED in this District for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-maned Act, should it once COMMUNICATE with the Becretary to the Board of the abore-mentioned District at the following address:—Heathfield Villa, Woltzhampton.

By order of the Board, "WM. BLAKEMORE, Secretary."

N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

FOUR-AND-A-HALF PER CENT. DEBENTURES.

FOUR-AND-A-HALF PER CENT. DEBENTURES.

THE DIRECTORS of the BRISTOL AND PORTISHEAD PIER AND RAILWAY COMPANY are prepared to ISSUE DEBENTURES for IRREE or FIVE YEARS, and bearing interest at the rate of 4½ per cent. per samm, payable half-yearly, to replace existing securities.

This railway, which connects the new Ocean Steam Docks, nearly completed, at This railway, which connects the new Ocean Steam Docks, nearly completed, at The Properties of the Country, but the Country of the est. Address, J. F. R. Daniel, secretary, Portishead Offices, 6, Clare-steet, Bristol.

PARTNERSHIP OR INVESTMENT.

THE PROPRIETORS of an EXTENSIVE and VERY VALUABLE COLLIERY in SOUTH WALES require the ASSISTANCE of ONE or MORE GENTLEMEN with CAPITAL. Upwards of £25,000 has been judiciously expended on the property, which is capable of an output of 800 tons a day. Address, stating amount at command, to "G. L.," care of Street Brothers, Swiestreet, Lincoln's Inn, W.C. PARTNERSHIP OR INVESTMENT.

Seriestreet, Lincoin 2 Line, No. 2014.

A N ELIGIBLE OPPORTUNITY OCCURS FOR NINE OENTLEMEN to JOIN the ADVERTIBER in SUBSCRIBING £500 each, to PURCHABE and WORK a LEAD MINE in WALES, on which a considerable sum has already been expended, in consequence whereof a large return may be confidently expected. Full information and particulars will be given and vouched for, on application to "B," care of Mr. Harvey, Solicitor, Old Jewry, London.

MINING CAPTAIN.

WANTED, a THOROUGHLY COMPETENT CAPTAIN, to MANAGE a LEAD MINE in WALES. Must be able to price and applications, with references, testimonials, experience, and wages required, to be addressed to "H. T.," 35, New Broad street, London.

TO MINING COMPANIES.

WANTED,—A MINE MANAGER, of large Foreign and Colonial experience in Gold, Silver, Iron, &c., and Phosphates, desires a SITUATION as MANAGER, or to INSPECT FOREIGN MINING OF REDUCTION PROFERTIES. Is thoroughly up in the reduction of the Base Metal Ores of the Facific Slope, and the erection of the necessary plant. For testimonials and reference, address, in first instance, to "Cosmo," MINING JOURNAL Office, 26, Fleet street, London, E.C.

TO SHAREHOLDERS. WANTED TO PURCHASE, ONE HUNDRED SHARES in GROGWINION LEAD MINE (LIMITED), for prompt CASH.

Biate lowest price to "Investor," MINING JOURNAL Office, 26. Fleet-street, London, EC.

WANTED.—An ENGAGEMENT by a MINING ENGINEER as SUPERINTENDENT or GENERAL MANAGER. Speaks French, Italian, and Spanish. Has had 25 years' experience in Argentiferous Copper and Lead, Situmen and its products, Sulphur, Silver, and especially Gold Mining. Address, "X. Y.," 34, Spring street, Paddington.

WANTED.—A CORNISHMAN, at present Resident Manager of a large COPPER MINING and SMELTING ESTABLISHMENT, will be OPEN to a RE ENGAGEMENT in December. Speaks and writes French and German, and has some knowledge of Spanish. Unexceptionable references.

Address, "Ass. Inst. C.E.," Elisabetha Goldbergban, Oravicsa, Banat, Hun-

THE CAPE COPPER MINING COMPANY
Motion is hereby given, that at a MEETING of the Directors of this Company
RELD TO-DAY it was resolved—"That a DIVIDEND of SEVENTEEN SHILLINGS PER SHARE, free of income tax, be and is hereby declared, PAYABLE
to the 24th day of December instant to the shareholders on the books of the companyon the 15th instant; and the Transfer books will be closed during the said
15th instant:

By order of the Board,
J. C. LEAVER, Secretary.

6, Queen-street-place, London, 11th December, 1877.

ST. JOHN DEL REY MINING COMPANY
(LIMITED).

Notice is hereby given, that the HALF-YEARLY ORDINARY GENERAL
NERTING of this company will be HELD at the City Terminus Hotel, Cannontiret, London, on WEDNESDAY, the 19th day of December next, at Two o'clock

recisity.

To recive and adopt the Directors' Half-yearly Report, to declare a Dividend, and to propose and (if approved) pass resolutions confirming the purchase of the Dalah Mining Property.

JOHN HOCKIN, Managing Director.

5, Tokenhouse-yard, E.C., 3rd December, 1877.

RICHMOND CONSOLIDATED MINING COMPANY
Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of
lie shareholders of the Richmond Consolidated Mining Company will be HELD
at the City Ferminus Hotel, Cannon-street, London, on THURSDAY, the 20th
day of December, at Two o'clock in the afternoon, to receive the report of the
director for the half-year.
By order of the Board, HUBERT AKERS, Secretary (pro term.)
44, Coleman-street, E.C., 11th December, 1877.

THE BRITISH CONSOLS SILVER MINING COMPANY

(LIMITED).

Capital £20,000, in 1000 shares of £20 each. 01 which 333 are taken by the vendor and 200 subscribed privately, leaving only 467 to be offered for subscription. Deposit on application, £10; and £10 in two months.

The company is formed for the erection of machinery and working of six vaisable sliver mines in the San Juan County, Colorado, U.S. They have all paid
valued and are not being worked. A dividend may be expected about the lat of
lone, 1875. The stock holders may be sore of receiving at least 30 per cent.
The mines comprise some of the largest in the world, and contain ore of a most
reperior catter, specimens of which can be seen at the office.

Farties wishing for a sound investment, with a high rate of interest, should
apply at once to—

R. ROWLEY, SECRETARY, 35, WALBROOK, LONDON, E.C.

OHN B. REYNOLDS, STOCK AND SHARE DEALER, 10 AND 71, BISHOPSGATE STREET WITHIN, LONDON, E.C. Bailiness transacted at net prices in all kinds of Stocks and Shares. Information fosceraing various Securities obtainable from all parts of the United Kingdom. Special correspondents can be retained from all mining districts.

Mines inspected and reported upon at most moderate charges. Information obtained concerning such shares as are not dealt in on the Mining Sarkers.

Established Twenty Years.

Barkers—City Bank, London; Messrs. Tweedy, Williams, and Co., Cornwall.

REYNOLDS' "PROSPECTS AND POLICY OF INVESTORS."

Compiled to be a special guide to those interested in Tin Mines at the present the total and the present the prese

CAPTAIN ABSALOM FRANCIS,
GOGINAN ABERYSTWITH.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1802 and 1807, and of the TUCKER'S DOWNS MINING COMPANY.—By the direction of His Honor, the Vice Warden, Notice is hereby given, that on Saturday, the 22nd day of December instant, at Eleven o'clock in the forencen, at the Registrar's Office, at Truro, in the county of Cornwall, this Court will proceed to MAKE a CALL of TWO POUNDS AND TEN SHILLINGS PER SHARE on all the contributories of the said company, settled on the List of Contributories as present members.

members.

All persons interested therein are entitled to attend at the time and place aforeall persons interested to such call.

Said to offer objections to such call.

CHARLES WILLIAM CLINTON, Official Liquidator.

Dated Stannaries Court Office, Truro, 12th December, 1877.

SOUTH PRINCE PATRICK LEAD MINING COMPANY SOUTH PRINCE PATRICK LEAD MINING COMPANY (LIMITED).

TENDERS are INVITED for the PURCHASE of the LEASE, PLANT, &c., of the above Mines, situate at Halkyn, near Holywell, Property may be viewed on application to Capt. John Jones, 12, Panton-place, Bolywell.

Tenders to be sent in on or before 1st January, 1878, addressed to A. C. Cox, 20, Colemore-row, Birmingham.

The vendor reserves the right to reject the highest or any other Tender.

The vendor reserves the right to reject the highest or any other Tender.

VALUABLE MINING MACHINERY AND PLANT, at the PROVIDENCE MINES, Uny Leiant, Cornwall, FOR SALE, BY PRIVATE CONTRACT, in Lots, to suit the convenience of purchasers—viz.:—ONE 40 in. PUMPING ENGINE, 9 ft. stroke, with TWO 11 ton BOILERS, and FITTINGS.

ONE 30 in. STAMPING ENGINE, 9 ft. and 8 ft. stroke, with TWO BOILERS, 19 tons, two fly wheels and wrought-iron shafts, two stamps axles for 32 heads, with heads, lifters, &c.

ONE 30 in. WINDING ENGINE, double acting, 6 ft. stroke, with TWO BOILERS, 10 tons and 8 tons, and whim cage.

ONE 20 in. "MAN ENGINE," double acting, 6 ft. stroke, one fly wheel, two wrought-iron shafts, and ONE 8 ton HOILER and FITTINGS, balance bob, &c.

OME heavy 10 feet diameter TOOTH WHEEL, with wrought-iron shaft, plummer blocks and brasses.

ONE 8 in. HORIZONTAL ENGINE, 20 in. stroke.

BALANCE BOB at engine, with connecting rod, &c., complete.

Also all the extensive

PLANT, MATERIALS, GEAR, AND MACHINERY,
Including PUMPS of various sizes.

Including PUMPS of various sizes.

Farticulars in an inventory thereof, which may be seen on the mine.

For further information, and to view, apply to Captain Hollow, the Manager, on the Mine; or to—

Mr. EDWARD TRYTHALL, the Purser, Penzance.

TO BE SOLD, BY PRIVATE CONTRACT, a FIRST-CLASS WAY GOING COLLIERY, with FIRE BRICK WORKS, situated on main line of railway. Output, 600 tons per week; can be considerably increased; fair average. A fine opportunity for a gentleman open to invest a few thousand pounds in a good concern.

For particulars address, "Owner," 187, Norfolk street, Sheffield.

MINES IN IRELAND.

BONA FIDE CAPITALISTS may learn in what MINES to INVEST WITH SAFETY AND PROFIT on application to "Mining Engineer." First-class references given and required.

Balleydehob, Co. Cork, Ireland, Oct. 31.

W A T E R - W H E E L S O N S A L E
In CARNARVONSHIRE.
ONE 30 feet by 3 feet breast.
ONE ditto ditto
ONE 18 feet by 3 feet breast.
Also, several BLATE SAWING TABLES, all in first class order.
McILQUHAM, ABERYSTWITH.

HYDRAULIC PUMPING ENGINES, TWO, 50 H.P. ENGINES ON SALE-a Bargain. Apply,-SUN FOUNDRY, LEEDS.

TWENTY-FIVE HP. PORTABLE ENGINE, almost new, FOR SALE OR HIRE, or on hire with option of purchase, on

ENGINES, BOILERS, AND COLLIERY PLANT, of every decription, new and 'econdhand, always in stock. J. H. REDDEL AND CO., ENGINEERS, GLASGOW.

TOR SALE, a 14-horse power PORTABLE STEAM ENGINE, with link motion reversing gear, also gear to wind and pump.

A 25-horse power PORTABLE.

An 18-horse power VERTICAL STEAM ENGINE, and a 9½ in. cylinder VER TICAL ENGINE, and combined winding drum.

A 4-ft. PAN MORTAR MILL, VERTICAL ENGINE, and BOILER.

Apply to—

4-ft. PAN MURTAR MILLS, Apply to—
BARROWS AND STEWART, ENGINEERS, BANBURY. OR SALE, at NEW PEMBROKE MINE, CORNWALL.— An excellent 80 in. cylinder PUMPING ENGINE, with FOUR good 12 ton 25 in. DRAWING ENGINE, and TWO BOILERS. TWO SPARE BOILERS. TWO SPARE BOILERS. 100 fathoms FLAT RODS, 3½ inch. A quantity of ROD PLATES and other MATERIALS. Apply to Mr. JOHN POLKINGHORNE, PAR OFFICE, PAR STATION.

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VACANCIES FOR THREE PUPILS AFTER CHRISTMAS.

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The best instruction will also be given in Latin and the Foreign Languages, the Planoforte, Organ, &c.

N.B.—The Education given on all subjects will be thorough, and such as to expect the confidence and merit the esteem of Parents and Guardians committing their Sons to the care of the Principal.

Terms on application to the Principal, Burbank College, West Hartlepool.

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Agents to THE STEEL COMPANY OF SCOTLAND (LIMITED), MANUFACTURERS OF

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Correct Assays per return of post: 7s. 6d, each sample. FOSTAL ADDRESS:

ST. GEORGE, GLOUCESTERSHIRE, NEAR BRISTOL. W. F. LOWE, F.C.S.,

Associate of the Royal School of Mines. ASSAYER AND ANALYTICAL CHEMIST ASSAYS AND ANALYSES MADE OF ORMS, FIRM-CLAYS, LIMESTONES, &c.

ADDRESS, - ASSAY OFFICE, CHESTER.

Mr. J. H. COLLINS, FG.S.

PUBLIC ANALYST for the County of Cornwall and Borough of Penzanee, NO BLIC ANALYSI' for the county or cornwall and Borough of Penzanes, UNDERTAKES the ANALYSI's of all articles of FOOD, DRINK, DRUGS, MINERALS, MANURES, SOILS, or COMMERCIAL PRODUCTS. Also the INSPECTION of MINERAL PROPERTIES.

Private Instruction given in Practical Chemistry, Mineralogy, or For terms, apply by letter, 57, Lemon-street. Truro.

MALLEABLE IRON CASTINGS. Every Description. W. B. MAPPLEBECK, JUN., 21 AND 22, LOVEDAY STREET.

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WINDING ENGINES, NEW PRINCIPLE, best and most compact in the market. Several pairs ready.

PORTABLE WINDING AND SINKING ENGINES, the cheapest and most convenient and durable.

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STEAM CAPSTANS AND HAULING ENGINES. The greatest power in the space of any made.

HORIZONTAL, VERTICAL, AND PORTABLE ENGINES. First-class make and low price.

PUNCHING, SHEARING, DRILLING, AND OTHER MACHINES.

Many of the above secondhand, very cheap.

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MANUFACTURE RAILWAY CARRIAGES and WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They
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tained by contract. MANUFACTURERS also of IRONWORK, WHEELS, and
AXLES.

EDMUND FOWLER, Managing Director.

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J. J. ARIS AND CO., MINING ENGINEERS, MINERAL AND METAL MERCHANTS, 29, FENCHURCH STREET, LONDON, E.C.

Mines inspected and reported upon. EMMENS AND CO. (LIMITED), MINING ENGINEERS AND MANUFACTURING CHEMISTS.

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Assays or Complete Analyses made of Copper, Silver, Lead, Zino, Tin, and other Ores.

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W. KENRICK AND CO. WM. CONTRACTORS.

ROCK BLASTING, SHAFT SINKING, TUNNELLING, MINING, &c., WITH DRILLING MACHINERY, HIGH-EXPLOSIVES, AND ELECTRICITY.—A SPECIALITY. WORK SOLICITED AT HOME AND ABROAD.

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MEXICO, NEW MEXICO, ARIZONA, UTAH, NEVADA, AND CALIFORNIA.

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gives correct, safe, and responsible advice as to securing full titles and possession;
and, as to best mode of utilising the property, will assist in settling existing diff
culties by compromise, and in disposing of developed mining property when held
at real value; offers his assistance for securing undeveloped mining properties at
home prices. As to care taken in reporting, reference is made to the Mining Journal
Grant and Railway Company; as to technical standing, to the prominent men of
the trade—compare Mining Journal of Ang. 30 and Nov. 31, 1872, and New York
Engineer and Mining Journal, 5b. 28, 1874.

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RACTS AND FIGURES showing the SECURITY, PROFIT, and PERMANENCE of BRITISH LEAD MINES, compared with British and Foreign Blocks, Land, British, Odonial, and American Ruilways, Banks, and other industrial undertakings, and also with the numerous speculative and visionary enterprises which have so unaccountably attracted and caught British capitalists, and subjected them to such heavy losses, both of interest and

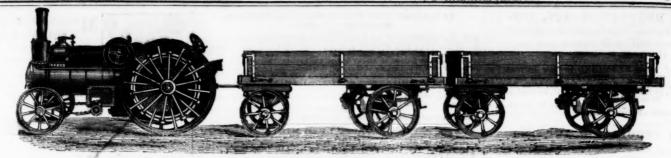
British capitalitie, and support principal.

By JOHN B. PIKE, Crown Chambers, Threadneedle-street, F.C.

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A DIPLOMA—HIGHEST OF ALL AWARDS—given by the Geographical Congriss, Paris, 1875—M. Favre, Contractor, having exhibited the McKean Drill alone as the Model Boring Machine for the St. Gothard Tunnel.

SILVER MEDAL of the Highland and West of Scotland Agricultural Society, 1875—HIGHEST AWARD.

At the south end of the St. Gothard Tunnel, where

THE MCKEAN ROCK DRILLS

Are exclusively used, the advance made during eight consecutive weeks, ending February 7, was 24.90, 27.60, 24.80, 26.10, 28.30, 27.10, 28.40, 28.70 metres. Total advance of south heading during January was 121.30 metres, or 133 yards.

In a series of comparative trials made at the St. Gothard Tunnel, the McKean Rock Drill continued to work until the pressure was reduced to one-half atmosphere (7½ lbs.), showing almost the entire motive force to be available for the blow against the rock—a result of itself indicating many advantages.

The GREAT WESTERN RAILWAY has adopted these Machines for the SEVERN TUNNEL; the LONDON AND NORTH-WESTERN RAILWAY for the FESTINIOG TUNNEL: and the BRITISH GOVERNMENT for several Public Works. A considerable number of Mining Companies are now using them. Shafts and Galleries are driven at from three to six times the speed of hand labour, according to the size and number of machines employed, and with important saving in cost. The ratio of advantage over hand labour is greatest where the rock is hardest.

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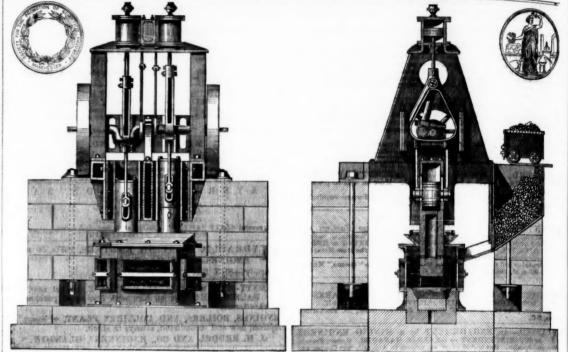
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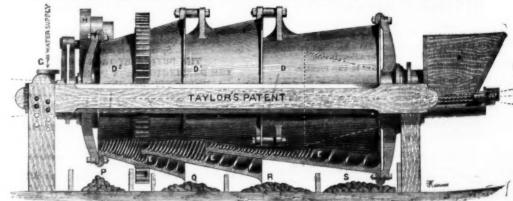
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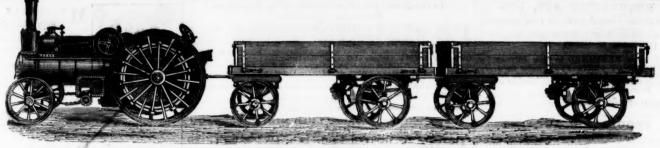
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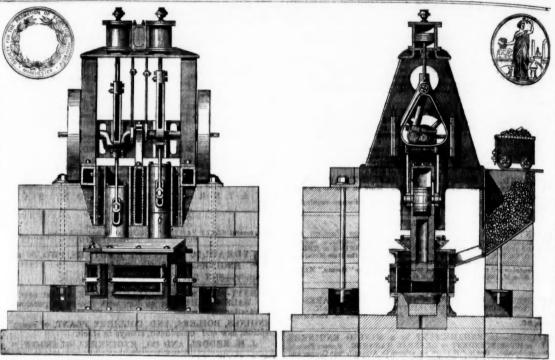
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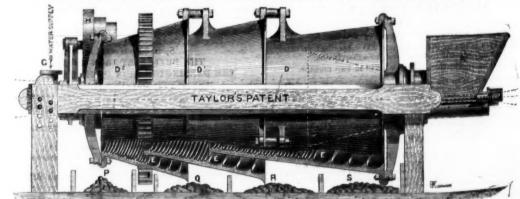
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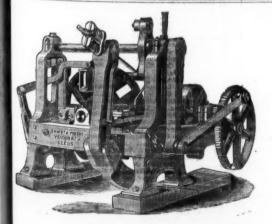
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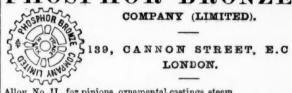
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FOREIGN AND MISCELLANEOUS STOCKS, BONDS, LOANS, AND TRUSTS.

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b, blende; cl. coal; c, copper; g, gold; l, lead; s, silver; al, slate;
s-l, silver!ead; l, tin; s, zinc. " Limited Liability Companies; † quoted on the Stock Exchange; I have paid dividends.

IRON AND COAL COMPANIES.

NON-DIVIDEND MINES.	10. 18
Mings. Pard. Last wk. Clas.	SAGRAS, COMPANIES COMPANIES
ant. f. Lianidioss 1 0 0 114 34 134 134 134 134 134 134 134 134	15 All Old And Co. Fr. 1
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ait., *, c, Tavist. (1l. liab.) c, l'evon (27,000 ty. pq.,) 1 0 0 4 1 0 0	### A Blaen Cwmbach Coal Co. [L.] 10 0 0 15 #### A Blaen Cwmbach Coal Co. [L.] 10 0 0 15 ###################################
t, c, 8t. Agnes	100 Bolckow, Vaughan, and Co. [L.] 80 0 0 50 Bowling Iron Co. [L.] 80 0 0 0
. 54, Denbighshire 1 0 0 11/1 1 11/2 ale, * s-1, Durham 5 0 0	50 Britannia Ironworks [L.]
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	100 Carellore Colliery Co Fr 5
lls, 4, Cumberland* 2 00.	lo Cannock and Huntington Co. 1 80 0 0
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t, Wendron 200	10 Chillington Iron Co. [L.] 50 0 0 124 1 1 Clee Hill Colliery Co. [L.] 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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6 St Claret	10 General Mining Ass. [L.] (£1 returned) 9 0 0 25 28 28 28 28 28 28 28 28 28 28 28 28 28
oor*, l. Pareley Bdge 10 0 0 10½10 10½ l. Cardigan	Great Western Coal Co. [L.] Gwyngwillim Colliery Co. [L.] Holyin Colliery Co. [L.]
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1, Durham (£1 sh.). 0 5 0 arham 0 15 0 1	100 Parkgate Iron Co. (L.) 38 00 14 -
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20 Sheffield Wagon Co. [L.]	18 10	0 0	814	83

TELEGRAPH COMPANIES.

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MISCELLANEOUS.

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